PART 70 OPERATING PERMIT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

ASF-Keystone, Inc. Hammond Plant 4831 Hohman Avenue Hammond, Indiana 46327

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T089-8273-00204	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: July 29, 2002
Issued by: Ronald L. Novak, Director Hammond Department of Environmental Management	Expiration Date: July 29, 2007

TABLE OF CONTENTS

Α	SOURCE A.1 A.2 A.3 A.4	Summary 8 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] Part 70 Permit Applicability [326 IAC 2-7-2]	
В	B.1 B.2 B.3 B.4 B.5 B.6 B.7 B.8 B.9 B.10 B.11 B.12 B.13 B.14 B.15 B.16 B.17 B.18 B.19 B.20 B.21 B.22 B.23 B.24	Definitions [326 IAC 2-7-1] Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] Enforceability [326 IAC 2-7-7] Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)] Severability [326 IAC 2-7-5(5)] Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)] Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)] Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)] Annual Compliance Certification [326 IAC 2-7-6(5)] Preventive Maintenance Plan [326 IAC 2-7-6(5)] Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)] Emergency Provisions [326 IAC 2-7-16] Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12] Prior Permit Conditions Superseded [326 IAC 2-1.1-9.5] Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)] Permit Modification, Reopening, Revocation and Reissuance, or Termination Permit Renewal [326 IAC 2-7-4] Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] Permit Revision Under Economic Incentives and Other Programs Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5] Source Modification Requirement [326 IAC 2-7-10.5] Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] Transfer of Ownership or Operation [326 IAC 2-7-5(7)]	
С	SOURCE OPERATION CONDITIONS 24 Emission Limitations and Standards [326 IAC 2-7-5(1)]		
	C 1	Onacity [326 IAC 5_1]	

С

- C.3
- C.4
- Opacity [326 IAC 5-1]
 Open Burning [326 IAC 4-1] [IC 13-17-9]
 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
 Fugitive Dust Emissions [326 IAC 6-4]
 Fugitive Dust Emissions [326 IAC 6-1-11.1] C.5
- Lake County Particulate Matter Contingency Measures [326 IAC 6-1-11.2] C.6
- Operation of Equipment [326 IAC 2-7-6(6)] C.7
- Stack Height [326 IAC 1-7] C.8
- C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

Testing Requirements [326 IAC 2-7-6(1)]

C.10 Performance Testing [326 IAC 3-6]

Compliance Requirements [326 IAC 2-1.1-11]

Compliance Requirements [326 IAC 2-1.1-11] C.11

ASF-Keystone, Inc. - Hammond Plant
Page 3 of 62
4831 Hohman Avenue, Hammond, Indiana 46327
OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

- C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.13 Continuous Compliance Plan [326 IAC 6-1-10.1(I)]
- C.14 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.15 Monitoring Methods [326 IAC 3]
- C.16 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.17 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.18 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.19 Compliance Response Plan Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.20 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.21 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
- C.22 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection

C.24 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS – 50-Ft. Bar Furnace (Unit ID 2-5027)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 Particulate Matter less than 10 microns in diameter (PM10)
- D.1.2 Sulfur Dioxide (SO2)

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-7-6(1)]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.4 Compliance Monitoring Requirements

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.5 Record Keeping and Reporting Requirements

D.2 FACILITY OPERATION CONDITIONS - Medium Screw Furnace (Unit ID 2-5075)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.2.1 Particulate Matter less than 10 microns in diameter (PM10)
- D.2.2 Sulfur Dioxide (SO2)

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1)]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.4 Compliance Monitoring Requirements

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

ASF-Keystone, Inc. - Hammond Plant
Page 4 of 62
4831 Hohman Avenue, Hammond, Indiana 46327
OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

D.2.5 Record Keeping and Reporting Requirements

D.3 FACILITY OPERATION CONDITIONS - Nine (9) Spring Grinders

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.3.1 Particulate Matter less than 10 microns in diameter (PM10)
- D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.3.3 Testing Requirements [326 IAC 2-7-6(1)]
- D.3.4 Particulate Matter

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.3.5 Visible Emissions Notations
- D.3.6 Parametric Monitoring
- D.3.7 Broken or Failed Bag Detection

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.8 Record Keeping Requirements

D.4 FACILITY OPERATION CONDITIONS - Large Line Coil Spring Manufacturing Process

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.4.1 Particulate Matter less than 10 microns in diameter (PM10)
- D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.4.3 Testing Requirements [326 IAC 2-7-6(1)]
- D.4.4 Particulate Matter

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.4.5 Visible Emissions Notations
- D.4.6 Parametric Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.7 Record Keeping Requirements

D.5 FACILITY OPERATION CONDITIONS - Medium Line Spring Manufacturing Process

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.5.1 Particulate Matter less than 10 microns in diameter (PM10)
- D.5.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.5.3 Testing Requirements [326 IAC 2-7-6(1)]
- D.5.4 Particulate Matter

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.5.5 Visible Emissions Notations
- D.5.6 Parametric Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

ASF-Keystone, Inc. - Hammond Plant
Page 5 of 62
4831 Hohman Avenue, Hammond, Indiana 46327
OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

D.5.7 Record Keeping Requirements

D.6 FACILITY OPERATION CONDITIONS - Small Line Coil Spring Manufacturing Process

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.6.1 Particulate Matter less than 10 microns in diameter (PM10)
- D.6.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.6.3 Testing Requirements [326 IAC 2-7-6(1)]
- D.6.4 Particulate Matter

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.6.5 Visible Emissions Notations
- D.6.6 Parametric Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.6 Record Keeping Requirements

D.7 FACILITY OPERATION CONDITIONS - Sellers Boiler No. 4-5509

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.7.1 Particulate Matter less than 10 microns in diameter (PM10)
- D.7.2 Sulfur Dioxide (SO2)

Compliance Determination Requirements

D.7.3 Testing Requirements [326 IAC 2-7-6(1)]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.4 Compliance Monitoring Requirements

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.5 Record Keeping and Reporting Requirements

D.8 FACILITY OPERATION CONDITIONS - Spray Painting Operation (Booths 3-2714 and 3-2715)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.8.1 Volatile Organic Compound (VOC) [326 IAC 8-2-9]
- D.8.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.8.3 Volatile Organic Compounds
- D.8.4 Particulate Matter

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.8.5 Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.6 Record Keeping Requirements

D.9 FACILITY OPERATION CONDITIONS - Nine (9) Spring Coating Dip Tanks

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

Compliance Determination Requirements

D.9.2 Volatile Organic Compounds

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.9.3 Compliance Monitoring Requirements

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.9.4 Record Keeping Requirements

D.10 FACILITY OPERATION CONDITIONS - Insignificant Activity – Small Screw Furnace (Unit ID 2-5085)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.10.1 Particulate Matter less than 10 microns in diameter (PM10)

D.10.2 Sulfur Dioxide (SO2)

Compliance Determination Requirements

D.10.3 Testing Requirements [326 IAC 2-7-6(1)]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.10.4 Record Keeping and Reporting Requirements

D.11 FACILITY OPERATION CONDITIONS - Insignificant Activity - Large Slot Furnace (Unit ID 2-5036)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.11.1 Particulate Matter less than 10 microns in diameter (PM10)

D.11.2 Sulfur Dioxide (SO2)

Compliance Determination Requirements

D.11.3 Testing Requirements [326 IAC 2-7-6(1)]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.11.4 Record Keeping and Reporting Requirements

D.12 FACILITY OPERATION CONDITIONS - Insignificant Activity – Slot Furnaces (Medium Line) (Unit IDs 2-5014 and 2-5015)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.12.1 Particulate Matter less than 10 microns in diameter (PM10)

D.12.2 Sulfur Dioxide (SO2)

Compliance Determination Requirements

D.12.3 Testing Requirements [326 IAC 2-7-6(1)]

ASF-Keystone, Inc. - Hammond Plant
Page 7 of 62
4831 Hohman Avenue, Hammond, Indiana 46327
OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.12.4 Record Keeping and Reporting Requirements

D.13 FACILITY OPERATION CONDITIONS - Insignificant Activity – Small Slot Furnace (Unit ID 2-5006)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.13.1 Particulate Matter less than 10 microns in diameter (PM10)
- D.13.2 Sulfur Dioxide (SO2)

Compliance Determination Requirements

D.13.3 Testing Requirements [326 IAC 2-7-6(1)]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.13.4 Record Keeping and Reporting Requirements

D.14 FACILITY OPERATION CONDITIONS - Insignificant Activity - Pangborn Shot Peener (Unit No. 3-1804)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.14.1 Particulate Matter less than 10 microns in diameter (PM10)

Compliance Determination Requirements

- D.14.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]
- D.14.3 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.14.4 Visible Emissions Notations
- D.14.5 Parametric Monitoring
- D.14.6 Broken or Failed Bag Detection

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.14.7 Record Keeping Requirements

D.15 FACILITY OPERATION CONDITIONS - Insignificant Activity - Three (3) Wheelabrator Shot Peeners

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D. 15.1 Particulate Matter less than 10 microns in diameter (PM10)

Compliance Determination Requirements

- D.15.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]
- D.15.3 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.15.4 Visible Emissions Notations
- D.15.5 Parametric Monitoring
- D.15.6 Broken or Failed Bag Detection

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.15.7 Record Keeping Requirements

Certification 5

Emergency Occurrence Report 58

Quarterly Deviation and Compliance Monitoring Report 6

Natural Gas Fired Boiler Certification

52

ASF-Keystone, Inc. - Hammond Plant
Page 8 of 62
4831 Hohman Avenue, Hammond, Indiana 46327
OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the Hammond Department of Environmental Management (HDEM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a Steel Spring Coils Manufacturing plant.

Responsible Official: **John Wories, Jr., President**

Mailing Address: 1700 Walnut Street

Granite City, Illinois 62040-3100

Contact Person: Robert Wille, Customer Service

Source Address: 4831 Hohman Avenue

Hammond, Indiana 46327

SIC Code: 3493 – Steel Springs, except wire

County Location: Lake

County Status: Attainment for CO and Lead

Nonattainment for TSP, PM10, SO2, NO2, and Ozone

Source Status: Part 70 Permit Program

Major Source under Emission Offset Rules; Major Source, Section 112 of the Clean Air Act

Not 1 of 28 source categories listed under 326 IAC 2-2

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(1) 50-Ft. Bar Furnace (Unit ID 2-5027)

Screw furnaces are used to heat the entire bar prior to coiling. This unit has a maximum design capacity of 20.5 MMBtu/hr heat input and is natural gas-fired only.

(2) Medium Screw Furnace (Unit ID 2-5075)

Screw furnaces are used to heat the entire bar prior to coiling. This unit has a maximum design capacity of 13.0 MMBtu/hr heat input and is natural gas-fired only.

(3) Nine (9) Spring Grinders

This system includes the following grinders:

Unit ID	Unit Description	Maximum Design Rate (Tons of springs ground per hour)
Unit 3-0386	#2 Besly Ferris Wheel Grinder	1.6555 (for both Units 3-0386 & 3-0389, combined)
Unit 3-0389	Gardner Tub Grinder	1.6555 (for both Units 3-0386 & 3-0389, combined)
Unit 3-0385	#1 Besly Ferris Wheel Grinder	2.2035 (for Units 3-0385, 3-0394, & 3-0233, combined)
Unit 3-0394	Besly Swing Grinder	2.2035 (for Units 3-0385, 3-0394, & 3-0233, combined)
Unit 3-0233	Gardner Single End Grinder	2.2035 (for Units 3-0385, 3-0394, & 3-0233, combined)
Unit 3-0249	Gardner Paddle Wheel Grinder	0.1545
Unit 3-0247	Torrington Ferris Wheel Grinder	0.909
Unit 3-0244	#1 Mattison (Large) Grinder	4.309 (for both Units 3-0244 & 3-0393, combined)
Unit 3-0393	#2 Mattison (Small) Grinder	4.309 (for both Units 3-0244 & 3-0393, combined)

All nine units share an ETA 2000 Pulse-jet baghouse (Unit No. 3-3037).

(4) Large Line Coil spring Manufacturing Process

This process includes a draw furnace (No. 2-5164), which is used to stress-relieve the newly coiled springs and an oil quench tank (No. 3-2845). The maximum design rate of coil springs manufactured is 10,000 lbs/hr. The Draw Furnace is natural gas-fired only and has a maximum design capacity of 9.8 MMBtu/hr heat input. Particulate emissions (oil mists) generated during the quenching operation are controlled using an Electrostatic Precipitator (No. 3-3036).

(5) Medium Line Coil Spring Manufacturing Process

This process includes a draw furnace (No. 2-5097), which is used to stress-relieve the newly coiled springs and an oil quench tank (No. 3-2838). The maximum design rate of coil springs manufactured per hour is 6,000 lbs. The Draw Furnace is natural gas-fired only and has a maximum design capacity of 5.1 MMBtu/hr heat input. Particulate emissions (oil mists) generated during the quenching operation are controlled using an Electrostatic Precipitator (No. 3-3027).

(6) Small Line Coil Spring Manufacturing Process

This process includes a draw furnace (No. 2-5163), which is used to stress-relieve the newly coiled springs and an oil quench tank (No. 3-2821). The maximum design rate of coil springs manufactured per hour is 3,000 lbs. The Draw Furnace is natural gas-fired only and has a maximum design capacity of 5.1 MMBtu/hr heat input. Particulate emissions (oil mists) generated during the quenching operation are controlled using an Electrostatic Precipitator (No. 3-3024).

(7) Sellers Boiler No. 4-5509

This unit is used for spaceheating and to keep the quench oil fluid during colder weather. It has a maximum design capacity of 10.5 MMBtu/hr heat input and is natural gas-fired only.

(8) Spray Painting Operation (Booths 3-2714 and 3-2715)

Booth 3-2715 is used to spray paint on track recoiler assemblies only. Booth 3-2714 is used to coat springs. Particulate emissions are controlled by dry filters.

Permit Reviewer: LB, HDEM

(9) Nine (9) Spring Coating Dip Tanks

This operation includes the following units:

- (a) Dip Coating Stations 3-2865 and 3-2813 (Location: By Final Inspection Area). These dip coating stations are used to apply a clear coat on finished springs. This coating is thinned with a mixture of water and glycol ether.
- (b) Dip Coating Station 2865A (Location: By old tumbler/shotpeener Medium Spring Line Area). This station is used to apply a clear coat on finished springs. This coating is thinned with a mixture of water and glycol ether.
- (c) Dip Coating Stations 3-2867, 3-2868, and 3-2869 (Location: By Medium Magnaflux Area by the Torrington Grinder). 3-2867 is used to apply a clear coat thinned with a mixture of water and glycol ether. 3-2869 is used to apply a rust protectant on finished springs. 3-2868 is used to coat the springs with quench oil.
- (d) Dip Coating Stations 3-2870, 3-2871, and 3-2872 (Location: Large Magnaflux Area Northeast corner of the plant). 3-2870 is used to apply a clear coat thinned with a mixture of water and glycol ether on finished springs. 3-2871 holds rust preventative coating. 3-2872 holds guench oil.
- A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also consists of insignificant activities with potential uncontrolled emissions below the exemption levels specified in 326 IAC 2-1.1-3(d)(1), including those defined in 326 IAC 2-7-1(21):

(1) Small Screw Furnace (Unit ID 2-5085)

Screw furnaces are used to heat the entire bar prior to coiling. This unit has a maximum design capacity of 8.0 MMBtu/hr heat input and is natural gas-fired only.

(2) Large Slot Furnace (Unit ID 2-5036)

The slot furnace is used to heat bar ends prior to tapering. This unit has a maximum design capacity of 2.5 MMBtu/hr heat input and is natural gas-fired only.

(3) Slot Furnaces (Medium Line) (Unit Ids 2-5014 and 2-5015)

The slot furnaces are used to heat bar ends prior to tapering. These units have a combined maximum design capacity of 5.2 MMBtu/hr heat input and are natural gas-fired only.

(4) Slot Furnace (Small Line) (Unit ID 2-5006)

The slot furnace is used to heat bar ends prior to tapering. This unit has a maximum design capacity of 1.5 MMBtu/hr heat input and is natural gas-fired only.

(5) Pangborn Shot Peener (Unit No. 3-1804)

This unit is used to clean scale and rust from coil springs using steel shots. Particulate emissions are controlled by a baghouse (No. 3-3017).

Permit Reviewer: LB, HDEM

(6) Three (3) Wheelabrator Shot Peeners

Wheelabrator Shot Peeners (No. 3-1811, 3-1821, and 3-1823) are used to clean scale and rust from coil springs using steel shots. Each unit is controlled by a baghouse (No. 3-1811, 3-3022, and 3-1823, respectively).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(1) It is a major source, as defined in 326 IAC 2-7-1(22);

Permit Reviewer: LB, HDEM

SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM and HDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by HDEM.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

- B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]
 - (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320 ASF-Keystone, Inc. - Hammond Plant Page 13 of 62 4831 Hohman Avenue, Hammond, Indiana 46327 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM-OAQ and HDEM within a reasonable time, any information that IDEM-OAQ and HDEM may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM-OAQ and HDEM copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.
- B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]
 - (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
 - (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
 - (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.
- B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]
 - (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
 - (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
 - (c) A responsible official is defined at 326 IAC 2-7-1(34).
- B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]
 - (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Permit Reviewer: LB, HDEM

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM-OAQ and HDEM on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM-OAQ and HDEM may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
 - (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

Page 15 of 62 OP No. T089-8273-00204

ASF-Keystone, Inc. – Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327

Permit Reviewer: LB, HDEM

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM-OAQ and HDEM upon request and within a reasonable time, and shall be subject to review and approval by IDEM-OAQ and HDEM. IDEM-OAQ and HDEM may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (a) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or HDEM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or HDEM within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - For each emergency lasting one (1) hour or more, the Permittee notified IDEM OAQ and HDEM within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Page 16 of 62 OP No. T089-8273-00204

ASF-Keystone, Inc. – Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327

Permit Reviewer: LB, HDEM

(IDEM - OAQ)

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(HDEM)

Telephone Number: 219-853-6306 Facsimile Number: 219-853-6343

For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM-OAQ and HDEM may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM-OAQ and HDEM by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

ASF-Keystone, Inc. - Hammond Plant
Page 17 of 62
4831 Hohman Avenue, Hammond, Indiana 46327
OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM-OAQ or HDEM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM-OAQ or HDEM has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM OAQ or HDEM has issued the modification. [326 IAC 2-7- 12(b)(7)]

ASF-Keystone, Inc. - Hammond Plant Page 18 of 62 4831 Hohman Avenue, Hammond, Indiana 46327 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

B.14 Prior Permit Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated;
 - (2) revised; or
 - (3) deleted

by this permit.

- (b) All previous registrations and permits are superseded by this permit.
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
 - (a) Deviations from any permit requirements (for emergencies see Section B Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
 - (1) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]
 - (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
 - (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM-OAQ or HDEM determines any of the following:

ASF-Keystone, Inc. – Hammond Plant Page 19 of 62 4831 Hohman Avenue, Hammond, Indiana 46327 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

- (1) That this permit contains a material mistake.
- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM-OAQ or HDEM to reopen and revise this permit shall follow the same procedures that apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM-OAQ or HDEM at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM-OAQ or HDEM may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]
- B.17 Permit Renewal [326 IAC 2-7-4]
 - (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM-OAQ and HDEM and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(40) and 326 IAC 2-7-1(21). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM-OAQ and HDEM on or before the date it is due.
 - (2) If IDEM-OAQ and HDEM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

ASF-Keystone, Inc. – Hammond Plant Page 20 of 62
4831 Hohman Avenue, Hammond, Indiana 46327 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM-OAQ and HDEM, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM-OAQ and HDEM, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM-OAQ and HDEM fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

- B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
 - (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
 - (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]
 - (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
 - (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.
- B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
 - (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any pre-construction approval required by 326 IAC 2-7-10.5 has been obtained;

Page 21 of 62 OP No. T089-8273-00204

ASF-Keystone, Inc. – Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327

Permit Reviewer: LB, HDEM

- The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM-OAQ and HDEM in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]

The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM-OAQ or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM-OAQ, HDEM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy any records that must be kept under the conditions of this permit;
- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
- B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
 - (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
 - (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

ASF-Keystone, Inc. – Hammond Plant Page 23 of 62 4831 Hohman Avenue, Hammond, Indiana 46327 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM OAQ and HDEM within thirty (30) calendar days of receipt of a billing. Pursuant 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM OAQ or HDEM the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233- 0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM10 emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan.

C.6 Lake County Particulate Matter Contingency Measures [326 IAC 6-1-11.2]

The Permittee shall comply with the applicable provisions of 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures).

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

- C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]
 - (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
 - (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

ASF-Keystone, Inc. – Hammond Plant
Page 26 of 62
4831 Hohman Avenue, Hammond, Indiana 46327
OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control

The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector

The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

- C.10 Performance Testing [326 IAC 3-6]
 - (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM-OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM-OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM-OAQ and HDEM not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM-OAQ and HDEM if the source submits to IDEM-OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320 ASF-Keystone, Inc. – Hammond Plant Page 28 of 62
4831 Hohman Avenue, Hammond, Indiana 46327 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.13 Continuous Compliance Plan [326 IAC 6-1-10.1(I)]

Pursuant to 326 IAC 6-1-10.1(I) (Lake County PM10 Emission Requirements), the Permittee shall submit to IDEM-OAQ and HDEM, and maintain at the source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring, and record keeping requirements as specified in 326 IAC 6-1-10.1(p) through (r) or according to the Permittee's CCP.

- C.14 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
 - (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.
 - (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.
- C.15 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

- C.16 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
 - (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
 - (b) The Permittee may request the IDEM-OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.17 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on February 11, 1991.

ASF-Keystone, Inc. - Hammond Plant Page 29 of 62 4831 Hohman Avenue, Hammond, Indiana 46327 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

(b) If the ERP is disapproved by IDEM–OAQ and HDEM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

- (c) Upon direct notification by IDEM–OAQ and HDEM that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]
- C.18 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP);

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- C.19 Compliance Response Plan Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM-OAQ and HDEM upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit, and an expected timeframe for taking reasonable steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
 - (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shutdown, the IDEM-OAQ and HDEM shall be promptly notified of the expected date of the shutdown, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.

ASF-Keystone, Inc. – Hammond Plant Page 30 of 62 4831 Hohman Avenue, Hammond, Indiana 46327 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the equipment is operating, except for time necessary to perform quality assurance and maintenance activities.
- C.20 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM-OAQ within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
 - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM-OAQ that retesting in one hundred and twenty (120) days is not practicable, IDEM-OAQ may extend the retesting deadline.
 - (c) IDEM-OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.21 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
 - (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

Permit Reviewer: LB, HDEM

- (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM-OAQ and HDEM on or before the date it is due.
- C.22 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
 - (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or HDEM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or HDEM within a reasonable time.
 - (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]
 - (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
 - (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

ASF-Keystone, Inc. – Hammond Plant Page 32 of 62 4831 Hohman Avenue, Hammond, Indiana 46327 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

Hammond Department of Environmental Management 5925 Calumet Avenue Hammond, Indiana 46320

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM-OAQ and HDEM on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.24 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

Page 33 of 62 OP No. T089-8273-00204

ASF-Keystone, Inc. - Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327

Permit Reviewer: LB, HDEM

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: 50-Ft. Bar Furnace (Unit ID 2-5027) used to heat the entire bar prior to coiling, with a maximum design capacity of 20.5 MMBtu/hr heat input and natural gas fired only.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (h), emissions of particulate matter less than ten microns in diameter (PM10) from this unit shall be limited to 0.003 lbs/MMBtu and 0.16 lbs/hr. In addition, this unit shall fire natural gas only.

D.1.2 Sulfur Dioxide (SO2)

Pursuant to 326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations), subsection (b), this unit is limited to sulfur dioxide emissions of 0.3 lbs/MMBtu. However, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO2 emissions inherent with natural gas combustion is the allowable.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, if testing is required, compliance with the (PM10) limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements

D.1.4 There are no compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.5 Record Keeping and Reporting Requirements

There are no record keeping and reporting requirements for this facility.

ASF-Keystone, Inc. – Hammond Plant Page 34 of 62 4831 Hohman Avenue, Hammond, Indiana 46327 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Medium Screw Furnace (Unit ID 2-5075) used to heat the entire bar prior to coiling, with a maximum design capacity of 13.0 MMBtu/hr heat input and natural gas fired only.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (h), emissions of particulate matter less than ten microns in diameter (PM10) from this unit shall be limited to 0.003 lbs/MMBtu and 0.16 lbs/hr. In addition, this unit shall fire natural gas only.

D.2.2 Sulfur Dioxide (SO2)

Pursuant to 326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations), subsection (b), this unit is limited to sulfur dioxide emissions of 0.3 lbs/MMBtu. However, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO2 emissions inherent with natural gas combustion is the allowable.

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, if testing is required, compliance with the (PM10) limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements

D.2.4 There are no compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.5 Record Keeping and Reporting Requirements

There are no record keeping and reporting requirements for this facility.

Permit Reviewer: LB, HDEM

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Nine (9) Spring Grinders including the following grinders all controlled by one ETA 2000 Pulse-jet baghouse (Unit No. 3-3037).				
ETA 2000 False jet bagnouse (offit No. 5 3037).				
Unit ID	Unit Description	Maximum Design Rate (Tons of springs ground per hour)		
Unit 3-0386	#2 Besly Ferris Wheel Grinder	1.6555 (for both Units 3-0386 & 3-0389, combined)		
Unit 3-0389	Gardner Tub Grinder	ш ш		
Unit 3-0385	#1 Besly Ferris Wheel Grinder	2.2035 (for Units 3-0385, 3-0394, & 3-0233, combined)		
Unit 3-0394	Besly Swing Grinder	III III		
Unit 3-0233	Gardner Single End Grinder	ин ин		
Unit 3-0249	Gardner Paddle Wheel Grinder	0.1545		
Unit 3-0247	Torrington Ferris Wheel Grinder	0.909		
Unit 3-0244	#1 Mattison (Large) Grinder	4.309 (for both Units 3-0244 & 3-0393, combined)		
Unit 3-0393	#2 Mattison (Small) Grinder	ш ш		
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)				

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (d), emissions of particulate matter less than ten microns in diameter (PM10) from the nine (9) Spring Grinders shall be limited to the following:

Unit ID	PM10 Emission Limit (lbs/ton)	PM10 Emission Limit (lbs/hr)
Unit 3-0386	1.083	0.045
Unit 3-0389	(Combined limit for Units 3-0386 & 3-0389)	
Unit 3-0385	0.019	0.05
Unit 3-0394	(for each Unit 3-0385, 3-0394, & 3-0233)	
Unit 3-0233	(for each Unit 3-0385, 3-0394, & 3-0233)	
Unit 3-0249	3.792	1.82
Unit 3-0247	0.019	0.03
Unit 3-0244	0.021	0.040
Unit 3-0393	(Combined limit for Units 3-0244 & 3-0393)	
Total:	5.0/3 lhs/ton	2.085 lbs/br

Total: 5.043 lbs/ton 2.085 lbs/hr

D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its baghouse.

Compliance Determination Requirements

D.3.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

During the period between **30 and 36 months** after issuance of this permit, in order to demonstrate compliance with Condition D.3.1, the Permittee shall perform PM-10 testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every **five (5) years** from the date of this valid compliance demonstration. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C – Performance Testing.

D.3.4 Particulate Matter (PM)

Pursuant to 326 IAC 2-7-6 and in order to comply with D.3.1, the Baghouse (Unit ID 3-3037) for PM control shall be in operation and control emissions from this facility at all times when any of the nine grinders is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.5 Visible Emissions Notations

- (a) Visible emission notations of the Baghouse (Unit ID 3-3037) stack exhaust shall be performed at least once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

D.3.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the Nine Spring Grinders at least once per shift when any one of the nine grinders is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports. A pressure reading that is outside of the above mentioned range for any one reading is not a deviation from this permit. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM-OAQ and HDEM and shall be calibrated at least once every six (6) months.

Page 37 of 62 OP No. T089-8273-00204

ASF-Keystone, Inc. – Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327

Permit Reviewer: LB, HDEM

D.3.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.8 Record Keeping Requirements

- (a) To document compliance with Condition D.3.5, the Permittee shall maintain records of visible emission notations of the Baghouse (Unit ID 3-3037) stack exhaust.
- (b) To document compliance with Condition D.3.6, the Permittee shall maintain the following:
 - (1) Records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

ASF-Keystone, Inc. - Hammond Plant Page 38 of 62 4831 Hohman Avenue, Hammond, Indiana 46327 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Large Line Coil Spring Manufacturing Process including a draw furnace (No. 2-5164) used to stress-relieve the newly coiled springs and an oil quench tank (No. 3-2845). The maximum design rate of coil springs manufactured is 10,000 lbs/hr. The Draw Furnace is natural gas-fired only and has a maximum design capacity of 9.8 MMBtu/hr heat input. Particulate emissions (oil mists) generated during the quenching operation are controlled by an Electrostatic Precipitator (No. 3-3036).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (d), emissions of particulate matter less than ten microns in diameter (PM10) from this unit shall be limited to 0.700 lbs/ton and 3.50 lbs/hr.

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit is required for this facility and its electrostatic precipitator.

Compliance Determination Requirements

D.4.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, if testing is required, compliance with the (PM10) limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.4.4 Particulate Matter (PM)

Pursuant to 326 IAC 2-7-6 and in order to comply with D.4.1, the Electrostatic Precipitator (Unit ID 3-3036) for PM control shall be in operation and control emissions from the quench portion of this facility at all times when the Large Line Coil Spring Manufacturing unit is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.5 Visible Emissions Notations

- (a) Visible emission notations of the Electrostatic Precipitator (No. 3-3036) stack exhaust shall be performed at least once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

ASF-Keystone, Inc. – Hammond Plant Page 39 of 62
4831 Hohman Avenue, Hammond, Indiana 46327 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

D.4.6 Parametric Monitoring

In order to comply with D.4.1, the Permitee shall monitor the hours of operation of this facility and clean the Electrostatic Precipitator (Unit ID 3-3036) and cartridges after 400 hours or less of operation.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.7 Record Keeping Requirements

- (a) To document compliance with Condition D.4.5, the Permittee shall maintain records of visible emission notations of the Electrostatic Precipitator (No. 3-3036) stack exhaust.
- (b) To document compliance with Condition D.4.6, the Permittee shall maintain records of the hours of operation of the electrostatic precipitator and the dates that the cartridges are cleaned.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

ASF-Keystone, Inc. - Hammond Plant
Page 40 of 62
4831 Hohman Avenue, Hammond, Indiana 46327
OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Medium Line Coil Spring Manufacturing Process including a draw furnace (No. 2-5097) used to stress-relieve the newly coiled springs and an oil quench tank (No. 3-2838). The maximum design rate of coil springs manufactured is 6,000 lbs/hr. The Draw Furnace is natural gas-fired only and has a maximum design capacity of 5.1 MMBtu/hr heat input. Particulate emissions (oil mists) generated during the quenching operation are controlled by an Electrostatic Precipitator (No. 3-3027).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (d), emissions of particulate matter less than ten microns in diameter (PM10) from this unit shall be limited to 0.700 lbs/ton and 2.10 lbs/hr.

D.5.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its electrostatic precipitator.

Compliance Determination Requirements

D.5.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, if testing is required, compliance with the (PM10) limit specified in Condition D.5.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.5.4 Particulate Matter (PM)

Pursuant to 326 IAC 2-7-6 and in order to comply with D.5.1, the Electrostatic Precipitator (Unit ID 3-3027) for PM control shall be in operation and control emissions from the quench portion of this facility at all times when the Medium Line Coil Spring Manufacturing unit is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.5 Visible Emissions Notations

- (a) Visible emission notations of the Electrostatic Precipitator (No. 3-3027) stack exhaust shall be performed at least once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

Page 41 of 62 OP No. T089-8273-00204

ASF-Keystone, Inc. – Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327

Permit Reviewer: LB, HDEM

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

D.5. 6 Parametric Monitoring

In order to comply with D.5.1, the Permitee shall monitor the number of hours of operation of this facility and clean the Electrostatic Precipitator (Unit ID 3-3027) and cartridges after 400 hours or less of operation.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5. 7 Record Keeping Requirements

- (a) To document compliance with Condition D.5.5, the Permittee shall maintain records of visible emission notations of the Electrostatic Precipitator (No. 3-3027) stack exhaust.
- (b) To document compliance with Condition D.5.6, the Permittee shall maintain records of the hours of operation of the electrostatic precipitator and the dates that the cartridges are cleaned.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

ASF-Keystone, Inc. - Hammond Plant
Page 42 of 62
4831 Hohman Avenue, Hammond, Indiana 46327
OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Small Line Coil Spring Manufacturing Process including a draw furnace (No. 2-5163) used to stress-relieve the newly coiled springs and an oil quench tank (No. 3-2821). The maximum design rate of coil springs manufactured is 3,000 lbs/hr. The Draw Furnace is natural gas-fired only and has a maximum design capacity of 5.1 MMBtu/hr heat input. Particulate emissions (oil mists) generated during the quenching operation are controlled by an Electrostatic Precipitator (No. 3-3024).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (d), emissions of particulate matter less than ten microns in diameter (PM10) from this unit shall be limited to 0.014 lbs/ton and 0.02 lbs/hr.

D.6.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its electrostatic precipitator.

Compliance Determination Requirements

D.6.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, if testing is required, compliance with the (PM10) limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.6.4 Particulate Matter (PM)

Pursuant to 326 IAC 2-7-6 and in order to comply with D.6.1, the Electrostatic Precipitator (Unit ID 3-3024) for PM control shall be in operation and control emissions from the quench portion of this facility at all times when the Small Line Coil Spring Manufacturing unit is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.5 Visible Emissions Notations

- (a) Visible emission notations of the Electrostatic Precipitator (No. 3-3024) stack exhaust shall be performed at least once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

Page 43 of 62 OP No. T089-8273-00204

ASF-Keystone, Inc. - Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327

Permit Reviewer: LB, HDEM

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

D.6.6 Parametric Monitoring

In order to comply with D.6.1, the Permitee shall monitor the hours of operation of this facility and clean the Electrostatic Precipitator (Unit ID 3-3024) and cartridges after 400 hours or less of operation.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.7 Record Keeping Requirements

- (a) To document compliance with Condition D.6.5, the Permittee shall maintain records of visible emission notations of the Electrostatic Precipitator (No. 3-3024) stack exhaust.
- (b) To document compliance with Condition D.6.6, the Permittee shall maintain records of the hours of operation of the electrostatic precipitator and the dates that the cartridges are cleaned.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

Page 44 of 62 OP No. T089-8273-00204

ASF-Keystone, Inc. – Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327

Permit Reviewer: LB, HDEM

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Sellers Boiler No. 4-5509 used for spaceheating and to keep the quench oil fluid during colder weather. The unit has a maximum design capacity of 10.5 MMBtu/hr heat input and is natural gas-fired only.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (h), emissions of particulate matter less than ten microns in diameter (PM10) from this unit shall be limited to 0.003 lbs/MMBtu and 0.16 lbs/hr. In addition, this unit shall fire natural gas only.

D.7.2 Sulfur Dioxide (SO₂)

Pursuant to 326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations), subsection (b), this unit is limited to sulfur dioxide emissions of 0.3 lbs/MMBtu. However, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO₂ emissions inherent with natural gas combustion is the allowable.

Compliance Determination Requirements

D.7.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, if testing is required, compliance with the (PM10) limit specified in Condition D.7.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements

D.7.4 There are no compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.5 Record Keeping and Reporting Requirements

A semi-annual summary of the natural gas fired boiler certification, shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six-month period being reported.

ASF-Keystone, Inc. - Hammond Plant Page 45 of 62 4831 Hohman Avenue, Hammond, Indiana 46327 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Spray Painting Operation (Booths 3-2714 and 3-2715). Booth 3-2715 is used to spray paint on track recoiler assemblies only. Booth 3-2714 is used to coat springs. Particulate emissions are controlled using dry filters.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.8.1 Volatile Organic Compound (VOC) [326 IAC 8-2-9]
 - (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volume weighted average volatile organic compound (VOC) content of coating applied shall be limited to 3.5 pounds of VOC per gallon of coating less water, as delivered to the applicator for any calendar day, for air-dried/extreme performance coatings.
 - (b) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- D.8.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their dry filters.

Compliance Determination Requirements

D.8.3 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.8.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.8.4 Particulate Matter (PM)

Pursuant to 326 IAC 2-7-6, the dry filters for PM control shall be in operation at all times when Spray Paint Booths (3-2714 and 3-2715) are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.8.5 Monitoring

(a) Daily inspections and manometer readings shall be performed to verify the placement, integrity and particle loading of the double dry filters. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

ASF-Keystone, Inc. – Hammond Plant
Page 46 of 62
4831 Hohman Avenue, Hammond, Indiana 46327
OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

(b) Redundant secondary particulate filter system shall be installed behind every primary particulate filter and, at each booth, a manometer reading of the secondary redundant filter system shall be recorded during each primary filter change to ensure that there is no overspray on the rooftops. Inspections of the plenum behind the secondary particulate filters shall be performed each time the secondary particulate filters are replaced. Inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground no less than once per quarter. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an overspray emission, evidence of overspray emission, or other abnormal emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.6 Record Keeping Requirements

- (a) To document compliance with Condition D.8.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.8.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of operation;
 - (3) The volume weighted VOC content of the coatings used for each month;
 - (4) The cleanup solvent usage for each month;
 - (5) The total VOC usage for each day; and
 - (6) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.8.5, the Permittee shall maintain records of daily inspections of the primary particulate filters and manometer readings across the primary filters, the manometer readings for the secondary particulate filters each time the primary filters are replaced, plenum filter inspections when the secondary particulate filters are replaced, quarterly rooftop inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements of this permit.

ASF-Keystone, Inc. - Hammond Plant
Page 47 of 62
4831 Hohman Avenue, Hammond, Indiana 46327
OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

SECTION D.9 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Spring Dip Coating Operation including the following dip tanks:

- (a) Dip Coating Stations 3-2865 and 3-2813 (Location: By Final Inspection Area). These dip coating stations are used to apply a clear coat on finished springs. This coating is thinned with a mixture of water and glycol ether.
- (b) Dip Coating Station 3-2865A (Location: By old tumbler/shotpeener Medium Spring Line Area). This station is used to apply a clear coat on finished springs. This coating is thinned with a mixture of water and glycol ether.
- (c) Dip Coating Stations 3-2867, 3-2868, and 3-2869 (Location: By Medium Magnaflux Area by the Torrington Grinder). 3-2867 is used to apply a clear coat thinned with a mixture of water and glycol ether. 3-2869 is used to apply a rust protectant on finished springs. 3-2868 is used to coat the springs with quench oil.
- (d) Dip Coating Stations 3-2870, 3-2871, and 3-2872 (Location: Large Magnaflux Area Northeast corner of the plant). 3-2870 is used to apply a clear coat thinned with a mixture of water and glycol ether on finished springs. 3-2871 holds rust preventative coating. 3-2872 holds quench oil.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.9.1 Volatile Organic Compound (VOC) [326 IAC 8-2-9]
 - (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volume weighted average volatile organic compound (VOC) content of coating applied shall be limited to 4.3 pounds of VOCs per gallon of coating less water, as delivered to the applicator for any calendar day.

Compliance Determination Requirements

D.9.2 Volatile Organic Compounds

Compliance with the VOC content and usage limitations contained in Condition D.9.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.9.3 There are no compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.9.4 Record Keeping Requirements
 - (a) To document compliance with Condition D.9.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.9.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type

Page 48 of 62 OP No. T089-8273-00204

ASF-Keystone, Inc. – Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327

Permit Reviewer: LB, HDEM

and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

- (2) A log of the dates of use;
- (3) The volume weighted VOC content of the coatings used for each day;
- (4) The cleanup solvent usage for each month;
- (5) The total VOC usage for each month; and
- (6) The weight of VOCs emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

Page 49 of 62 OP No. T089-8273-00204

ASF-Keystone, Inc. – Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327

Permit Reviewer: LB, HDEM

SECTION D.10 FACILITY OPERATION CONDITIONS – Insignificant Activity

Facility Description [326 IAC 2-7-5(15)]: Small Screw Furnace (Unit ID 2-5085) used to heat the entire bar prior to coiling. This unit has a maximum design capacity of 8.0 MMBtu/hr heat input and is natural gas-fired only.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.10.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (h), emissions of particulate matter less than ten microns in diameter (PM10) from this unit shall be limited to 0.003 lbs/MMBtu and 0.16 lbs/hr. In addition, this unit shall fire natural gas only.

D.10.2 Sulfur Dioxide (SO₂)

Pursuant to 326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations), subsection (b), this unit is limited to sulfur dioxide emissions of 0.3 lbs/MMBtu. However, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO_2 emissions inherent with natural gas combustion is the allowable.

Compliance Determination Requirements

D.10.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, if testing is required, compliance with the (PM10) limit specified in Condition D.10.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.10.4 Record Keeping and Reporting Requirements

Permit Reviewer: LB, HDEM

SECTION D.11 FACILITY OPERATION CONDITIONS – Insignificant Activity

Facility Description [326 IAC 2-7-5(15)]: Large Slot Furnace (Unit ID 2-5036) used to heat bar ends prior to tapering. This unit has a maximum design capacity of 2.5 MMBtu/hr heat input and is natural gas-fired only.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.11.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (h), emissions of particulate matter less than ten microns in diameter (PM10) from this unit shall be limited to 0.003 lbs/MMBtu and 0.16 lbs/hr. In addition, this unit shall fire natural gas only.

D.11.2 Sulfur Dioxide (SO₂)

Pursuant to 326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations), subsection (b), this unit is limited to sulfur dioxide emissions of 0.3 lbs/MMBtu. However, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO_2 emissions inherent with natural gas combustion is the allowable.

Compliance Determination Requirements

D.11.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, if testing is required, compliance with the (PM10) limit specified in Condition D.11.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.11.4 Record Keeping and Reporting Requirements

Permit Reviewer: LB, HDEM

SECTION D.12 FACILITY OPERATION CONDITIONS – Insignificant Activity

Facility Description [326 IAC 2-7-5(15)]: Slot Furnaces (Medium Line) (Unit IDs 2-5014 and 2-5015) used to heat bar ends prior to tapering. These units have a combined maximum design capacity of 5.2 MMBtu/hr heat input and are natural gas-fired only.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.12.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (h), emissions of particulate matter less than ten microns in diameter (PM10) from these units combined shall be limited to 0.003 lbs/MMBtu and 0.16 lbs/hr. In addition, this unit shall fire natural gas only.

D.12.2 Sulfur Dioxide (SO₂)

Pursuant to 326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations), subsection (b), this unit is limited to sulfur dioxide emissions of 0.3 lbs/MMBtu. However, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO_2 emissions inherent with natural gas combustion is the allowable.

Compliance Determination Requirements

D.12.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, if testing is required, compliance with the (PM10) limit specified in Condition D.12.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.12.4 Record Keeping and Reporting Requirements

Permit Reviewer: LB, HDEM

SECTION D.13 FACILITY OPERATION CONDITIONS – Insignificant Activity

Facility Description [326 IAC 2-7-5(15)]: Small Slot Furnace (Unit ID 2-5006) used to heat bar ends prior to tapering. This unit has a maximum design capacity of 1.5 MMBtu/hr heat input and is natural gas-fired only.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.13.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (h), emissions of particulate matter less than ten microns in diameter (PM10) from this unit shall be limited to 0.003 lbs/MMBtu and 0.16 lbs/hr. In addition, this unit shall fire natural gas only.

D.13.2 Sulfur Dioxide (SO₂)

Pursuant to 326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations), subsection (b), this unit is limited to sulfur dioxide emissions of 0.3 lbs/MMBtu. However, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO₂ emissions inherent with natural gas combustion is the allowable.

Compliance Determination Requirements

D.13.3 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, if testing is required, compliance with the (PM10) limit specified in Condition D.13.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.13.4 Record Keeping and Reporting Requirements

ASF-Keystone, Inc. – Hammond Plant
Page 53 of 62
4831 Hohman Avenue, Hammond, Indiana 46327
OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

SECTION D.14 FACILITY OPERATION CONDITIONS – Insignificant Activity

Facility Description [326 IAC 2-7-5(15)]: Pangborn Shot Peener (Unit No. 3-1804) used to clean scale and rust from coil springs using steel shots. Particulate emissions are controlled by a baghouse (No. 3-3017).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.14.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (d), emissions of particulate matter less than ten microns in diameter (PM10) from this unit shall be limited to 0.011 lbs/ton and 0.06 lbs/hr.

D.14.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its baghouse.

Compliance Determination Requirements

D.14.3 Particulate Matter (PM)

Pursuant to 326 IAC 2-7-6 and in order to comply with D.14.1, the Baghouse (Unit ID 3-3017) for PM control shall be in operation and control emissions from this facility at all times when the Pangborn Shot Peener is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.14.4 Visible Emissions Notations

- (a) Visible emission notations of the Baghouse (Unit ID 3-3017) stack exhaust shall be performed at least once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

D.14.5 Parametric Monitoring

Page 54 of 62 OP No. T089-8273-00204

ASF-Keystone, Inc. – Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327

Permit Reviewer: LB, HDEM

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the Pangborn Shot Peener at least once per shift when the Pangborn Shot Peener is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports. A pressure reading that is outside of the above mentioned range for any one reading is not a deviation from this permit. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM-OAQ and HDEM and shall be calibrated at least once every six (6) months.

D.14.6 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.14.7 Record Keeping Requirements

- (a) To document compliance with Condition D.14.4, the Permittee shall maintain records of visible emission notations of the Baghouse (Unit ID 3-3017) stack exhaust.
- (b) To document compliance with Condition D.14.5, the Permittee shall maintain the following:
 - (1) Records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

ASF-Keystone, Inc. – Hammond Plant
Page 55 of 62
4831 Hohman Avenue, Hammond, Indiana 46327
OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

SECTION D.15 FACILITY OPERATION CONDITIONS – Insignificant Activity

Facility Description [326 IAC 2-7-5(15)]: Three (3) Wheelabrator Shot Peeners. Wheelabrator Shot Peeners (No. 3-1811, 3-1821, and 3-1823) are used to clean scale and rust from coil springs using steel shots. Each unit is controlled by a baghouse (No. 3-1811, 3-3022, and 3-1823, respectively).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.15.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (d), emissions of particulate matter less than ten microns in diameter (PM10) from each unit shall be limited to the following:

Unit No. 3-1811: 0.018 lbs/ton and 0.06 lbs/hr Unit No. 3-1821: 0.016 lbs/ton and 0.06 lbs/hr Unit No. 3-1823: 0.016 lbs/ton and 0.06 lbs/hr

D.15.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its baghouse.

Compliance Determination Requirements

D.15.3 Particulate Matter (PM)

Pursuant to 326 IAC 2-7-6 and in order to comply with D.15.1, the Baghouses (Unit IDs 3-1811, 3-3022, and 3-1823) for PM control shall be in operation and control emissions from this facility at all times when any of the Wheelabrator Shot Peeners is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.15.4 Visible Emissions Notations

- (a) Visible emission notations of the Baghouse (Unit IDs 3-1811, 3-3022, and 3-1823) stack exhaust shall be performed at least once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with

Page 56 of 62 OP No. T089-8273-00204

ASF-Keystone, Inc. – Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327

Permit Reviewer: LB, HDEM

Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

D.15.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the Wheelabrator Shot Peeners at least once per shift when any one of the Wheelabrator Shot Peeners is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports. A pressure reading that is outside of the above mentioned range for any one reading is not a deviation from this permit. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM-OAQ and HDEM and shall be calibrated at least once every six (6) months.

D.15.6 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.15.7 Record Keeping Requirements

- (a) To document compliance with Condition D.15.4, the Permittee shall maintain records of visible emission notations of the Baghouse (Unit IDs 3-1811, 3-3022, and 3-1823) stack exhaust.
- (b) To document compliance with Condition D.15.5, the Permittee shall maintain the following:
 - (1) Records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

ASF-Keystone, Inc. - Hammond Plant

4831 Hohman Avenue, Hammond, Indiana 46327

Permit Reviewer: LB, HDEM

Page 57 of 62 OP No. T089-8273-00204

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AIR POLLUTION CONTROL DIVISION

PART 70 OPERATING PERMIT CERTIFICATION

Source Name:	ASF-Keystone, Inc. – Hammond Plant
Source Address:	4831 Hohman Avenue

4831 Hohman Avenue Hammond, Indiana 46327

Mailing Address: 1700 Walnut Street

Granite City, Illinois 62040-3100

Part 70 Permit No.: **T089-8273-00204**

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
Please check what document is being certified:
Annual Compliance Certification Letter
Test Result (specify)
Report (specify)
Notification (specify)
Other (specify)
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Printed Name:
Title/Position:
Date:

Permit Reviewer: LB, HDEM

Page 58 of 62 OP No. T089-8273-00204

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE BRANCH

P.O. Box 6015 100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AIR POLLUTION CONTROL DIVISION

5925 Calumet Avenue Hammond, Indiana 46320 Phone: 219-853-6306 Fax: 219-853-6343

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: ASF-Keystone, Inc. – Hammond Plant

Source Address: 4831 Hohman Avenue

Hammond, Indiana 46327

Mailing Address: 1700 Walnut Street

Granite City, Illinois 62040-3100

Part 70 Permit No.: **T089-8273-00204**

This form consists of 2 pages

Page 1 of 2

- •The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- •The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

Page 59 of 62 OP No. T089-8273-00204

Permit Reviewer: LB, HDEM

If any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency started:	
Date/Time Emergency was corrected:	
Was the facility being properly operated at the time of the emergency? Y N Describe:	
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _X , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent im severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials value:	
Form Completed By:	
Title / Position :	
Date:	
Phone:	

A certification is not required for this report.

Permit Reviewer: LB, HDEM

Page 60 of 62 OP No. T089-8273-00204

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AIR POLLUTION CONTROL DIVISION

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: ASF-Keystone, Inc. - Hammond Plant Source Address: 4831 Hohman Avenue Hammond, Indiana 46327 Mailing Address: 1700 Walnut Street Granite City, Illinois 62040-3100 Part 70 Permit No.: T089-8273-00204 Months: ______ to _____ Year: _____ Page 1 of 2 This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD **Permit Requirement** (specify permit condition #) Date of Deviation: **Duration of Deviation: Number of Deviations:** Probable Cause(s) of Deviation: Response Step(s) Taken: Permit Requirement (specify permit condition #) Date of Deviation: **Duration of Deviation:** Number of Deviations: Probable Cause(s) of Deviation: Response Step(s) Taken:

Permit Reviewer: LB, HDEM

Page 61 of 62 OP No. T089-8273-00204

Page 2 of 2 Permit Requirement (specify permit condition #) Date of Deviation: **Duration of Deviation: Number of Deviations:** Probable Cause(s) of Deviation: Response Step(s) Taken: Permit Requirement (specify permit condition #) Date of Deviation: **Duration of Deviation: Number of Deviations:** Probable Cause(s) of Deviation: Response Step(s) Taken: Permit Requirement (specify permit condition #) Date of Deviation: **Duration of Deviation: Number of Deviations:** Probable Cause(s) of Deviation: Response Step(s) Taken: Form Completed By: Title / Position: Date: Phone:

Attach a signed certification to complete this report.

Permit Reviewer: LB, HDEM

Page 62 of 62 OP No. T089-8273-00204

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AIR POLLUTION CONTROL DIVISION

PART 70 OPERATING PERMIT NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: ASF-Keystone, Inc. – Hammond Plant

Source Address: 4831 Hohman Avenue

Hammond, Indiana 46327

Mailing Address: 1700 Walnut Street

Granite City, Illinois 62040-3100

Part 70 Permit No.: T089-8273-00204

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.				
Boiler Affected	Alternate Fuel	Days burning alternate fuel	<u>From</u>	<u>To</u>
I certify that, based or document are true, acc		formed after reasonable inquiry, the	e statements and info	rmation in the
Signature:				
Printed Name:				
Title/Position:				
Date:				

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Name: ASF-Keystone, Inc. – Hammond Plant

Source Location: 4831 Hohman Avenue, Hammond, Indiana 46327

County: Lake County

SIC Code: 3493 – Steel Springs, except wire

Operation Permit No.: **T089-8273-00204**Permit Reviewer: **Lito Biscocho, HDEM**

On March 31, 2000, the Hammond Department of Environmental Management (HDEM) had a notice published in the Times, Hammond, Indiana, stating that American Steel Foundries – Hammond Plant had applied for a Part 70 Operating Permit to operate a Steel Springs Manufacturing Plant. The notice also stated that HDEM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments were received from American Steel Foundries on April 10, 2000, September 13, 2000, January 16, 2001, and July 31, 2001. Based on these comments, the HDEM has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The permit was also revised to reflect the various changes in the permit language brought about by changes in the permit model (bolded language has been added, the language with a line through it has been deleted).

Comment 1:

The HDEM received a letter from the source informing of the source's name change. The source name is being changed to ASF-Keystone, Inc. – Hammond Plant.

Response:

All references to American Steel Foundries – Hammond Plant throughout the permit were changed to ASF-Keystone, Inc. – Hammond Plant.

American Steel Foundries ASF-Keystone, Inc. - Hammond Plant

Comment 2:

The HDEM received a letter from the source informing of the change in Responsible Official, Mailing Address, and Contact Person.

Response:

The permit was revised as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a Steel Spring Coils Manufacturing plant.

Responsible Official: R. E. Barker John Wories, Jr., President

Mailing Address: 10 South Riverside Plaza, Suite 1000 1700 Walnut Street

Chicago Granite City, Illinois 6060162040-3100

Contact Person: Robert Ribbing, Manager, Environmental Affairs Robert Wille, Customer Service

Comment 3:

The source commented that there was a typographical error in Item (3) of Section A.2 for 3-0249 (Gardner Paddle Wheel Grinder). The rate in the proposed permit is 1.545 tons/hour. The correct rate is 0.1545 tons/hour.

Response:

Item (3) of Section A.2 of the Part 70 permit was revised as follows:

(3) Nine (9) Spring Grinders

This system includes the following grinders:

```
Unit 3-0386 (#2 Besly Ferris Wheel Grinder ) 1.6555 (for both Units 3-0386 & 3-0389, combined)
Unit 3-0389 (Gardner Tub Grinder ) ---
Unit 3-0385 (#1 Besly Ferris Wheel Grinder ) 2.2035 (for Units 3-0385, 3-0394, & 3-0233, combined)
Unit 3-0394 (Besly Swing Grinder ) ---
Unit 3-0233 (Gardner Single End Grinder ) ---
Unit 3-0249 (Gardner Paddle Wheel Grinder) 0.1-545
Unit 3-0247 (Torrington Ferris Wheel Grinder) 0.909
Unit 3-0244 (#1 Mattison (Large) Grinder) 4.309 (for both Units 3-0244 & 3-0393, combined)
Unit 3-0393 (#2 Mattison (Small) Grinder)
```

All nine units share an ETA 2000 Pulse-jet baghouse (Unit No. 3-3037).

Comment 4:

The source commented that the Electrostatic Precipitator used for the Large Line Coil Manufacturing Process is identified as No. 3-3036, not No. 3-3028.

Response:

1. Item (4) of Section A.2 was revised as follows:

Section A.2(4) Large Line Coil Spring Manufacturing Process

This process includes a draw furnace (No. 2-5164) which is used to stress-relieve the newly coiled springs and an oil quench tank (No. 3-2845). The maximum design rate of coil springs manufactured is 10,000 lbs/hr. The Draw Furnace is natural gas-fired only and has a maximum design capacity of 9.8 MMBtu/hr heat input. Particulate emissions from the quench tank are controlled by an Electrostatic Precipitator (No. 3-303628).

2. The Facility Description of Section D.4 of the Part 70 Permit was revised as follows:

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Large Line Coil Spring Manufacturing Process including a draw furnace (No. 2-5164) used to stress-relieve the newly coiled springs and an oil quench tank (No. 3-2845). The maximum design rate of coil springs manufactured is 10,000 lbs/hr. The Draw Furnace is natural gas-fired only and has a maximum design capacity of 9.8 MMBtu/hr heat input. Particulate emissions from the quench tank are

controlled by an Electrostatic Precipitator (No. 3-303628).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

- 3. Condition D.4.4 of the Part 70 Permit was revised as follows:
 - D.4.4 Particulate Matter (PM)

Pursuant to 326 IAC 2-7-6, the Electrostatic Precipitator (Unit ID 3-303628) for PM control shall be in operation at all times when the Large Line Coil Spring Manufacturing unit is in operation.

- 4. Condition D.4.5(a) of the Part 70 Permit was revised as follows:
 - (a) Daily visible emission notations of the Electrostatic Precipitator (No. 3-303628) stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- 5. Condition D.4.7(a) of the Part 70 Permit was revised as follows:
 - (a) To document compliance with Condition D.4.5, the Permittee shall maintain records of daily visible emission notations of the Electrostatic Precipitator (No. 3-303628) stack exhaust.

Comment 5:

The source commented that the products spray-painted at 3-2715 are properly called track recoiler assemblies, not slider assemblies. In addition, American Steel Foundries requested that the specific coating names for this unit be removed. The regulations do not require specific coatings to be named in the permit. If the coating names must remain please add "or equivalent".

Response:

- 1. Item (8) of Section A.2 of the Part 70 Permit was revised as follows:
 - (8) Spray Painting Operation (Booths 3-2714 and 3-2715)

Booth 3-2715 is used to spray black paint (Crawford Water-based Enamel) on slider track recoiler assemblies only. Booth 3-2714 is used to coat springs. Coatings used are John Deere Green and Beige Gloss Water-base Enamel. Particulate emissions are controlled by dry filters.

2. The Facility Description of Section D.8 of the Part 70 Permit was revised as follows:

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Spray Painting Operation (Booths 3-2714 and 3-2715). Booth 3-2715 is used to spray black paint (Crawford Water-based Enamel) on slider track recoiler assemblies only. Booth 3-2714 is used to coat springs. Coatings used are John Deere Green and tan. Particulate emissions are controlled by dry filters.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Comment 6:

The source requested that the specific coating names also be deleted for the dip tanks. The regulations do not require specific coatings to be named in the permit. If the coating names must remain please add "or equivalent".

Response:

- 1. Item (9) of Section A.2 of the Part 70 Permit was revised as follows:
 - (9) Nine (9) Spring Coating Dip Tanks

This operation includes the following units:

- (a) Dip Coating Stations 3-2865 and 3-2813 (Location: By Final Inspection Area). These dip coating stations are used to apply a clear coat (Valvoline Tectyl 300G clear coat) on finished springs. This coating is thinned with a mixture of water and glycol ether.
- (b) Dip Coating Station 3-2865A (Location: By old tumbler/shotpeener Medium Spring Line Area). This station is used to apply a clear coat (Valvoline Tectyl 300G clear coat) on finished springs. This coating is thinned with a mixture of water and glycol ether.
- (c) Dip Coating Stations 3-2867, 3-2868, and 3-2869 (Location: By Medium Magnaflux Area by the Torrington Grinder). 3-2867 is used to apply a clear coat (Valvoline Tectyl 300G clear coat) thinned with a mixture of water and glycol ether. 3-2869 is used to apply a rust protectant (Daubert NOX RUST X-110) on finished springs. The Daubert NOX RUST X-110 rust protectant is thinned with Kwik-Dry 66.—3-2868 is used to coat the springs with quench oil.
- (d) Dip Coating Stations 3-2870, 3-2871, and 3-2872 (Location: Large Magnaflux Area Northeast corner of the plant). 3-2870 is used to apply a clear coat (Valvoline Tectyl 300G clear coat) thinned with a mixture of water and glycol ether on finished springs. 3-2871 holds rust preventative coating (Daubert NOX RUST X-110) thinned with Kwik-Dry 66. 3-2872 holds guench oil.
- 2. The Facility Description of Section D.9 of the Part 70 Permit was revised as follows:

SECTION D.9 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Spring Coating Dip Operation including the following dip tanks:

- (a) Dip Coating Stations 3-2865 and 3-2813 (Location: By Final Inspection Area). These dip coating stations are used to apply a clear coat (Valvoline Tectyl 300G clear coat) on finished springs. This coating is thinned with a mixture of water and glycol ether.
- (b) Dip Coating Station 3-2865A (Location: By old tumbler/shotpeener Medium Spring Line Area). This station is used to apply a clear coat (Valvoline Tectyl 300G clear coat) on finished springs. This coating is thinned with a mixture of water and glycol ether.
- (c) Dip Coating Stations 3-2867, 3-2868, and 3-2869 (Location: By Medium Magnaflux Area by the Torrington Grinder). 3-2867 is used to apply a clear coat (Valvoline Tectyl 300G clear coat) thinned with a mixture of water and glycol ether. 3-2869 is used to apply a rust protectant (Daubert NOX RUST X-110) on finished springs. The Daubert NOX RUST X-110 rust protectant is thinned with Kwik-Dry 66.—3-2868 is used to coat the springs with quench oil.

(d) Dip Coating Stations 3-2870, 3-2871, and 3-2872 (Location: Large Magnaflux Area Northeast corner of the plant). 3-2870 is used to apply a clear coat (Valvoline Tectyl 300G clear coat) thinned with a mixture of water and glycol ether on finished springs. 3-2871 holds rust preventative coating (Daubert NOX RUST X-110) thinned with Kwik-Dry 66. 3-2872 holds quench oil.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Comment 7:

ASF commented that the 50-ft. Bar Furnace does not have a stack in order to perform the daily visible emission notations. Also, this unit is equipped with a natural gas meter but it is in a location that is not easily accessible. Thus, American Steel Foundries requested that these requirements be removed.

Response:

In response to this comment and because the furnace is designed to burn only natural gas, condition D.1.5 of the Part 70 Permit was revised as follows:

D.1.5 Record Keeping and Reporting Requirements

There are no record keeping and reporting requirements for this facility. To document compliance with Condition D.1.4, the Permittee shall maintain records of daily visible emission notations of the 50-Ft. Bar Furnace stack exhaust.

(b) The Permittee shall maintain daily fuel usage records for this unit.

(c)All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit..

Comment 8:

ASF commented that the Medium Screw Furnace does not have a stack in order to perform the daily visible emission notations. Also, this unit is not equipped with a natural gas meter. Thus, American Steel Foundries requested that these requirements be removed.

Response:

In response to this comment and because the furnace is designed to burn only natural gas, Condition D.2.5 of the Part 70 Permit was revised as follows:

D.2.5 Record Keeping and Reporting Requirements

There are no record keeping and reporting requirements for this facility.

(a)To document compliance with Condition D.1.4, the Permittee shall maintain records of daily visible emission notations of the Medium Screw Furnace stack exhaust.

(b) The Permittee shall maintain daily fuel usage records for this unit.

(c)All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Comment 9:

ASF commented that there was a typographical error in condition D.3.1 Unit 3-0247. The correct emission limit should be 0.019 lbs PM10/ton, not 0.09 lbs PM10/ton.

Response:

Condition D.3.1 of the Part 70 Permit was revised as follows:

D.3.1 Particulate Matter less than 10 microns in diameter (PM10)

Pursuant to 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements), subsection (d), emissions of particulate matter less than ten microns in diameter (PM10) from the nine (9) Spring Grinders shall be limited to the following:

Unit ID	PM10 Emission Limit (lbs/ton)	PM10 Emission Limit (lbs/hr)
Unit 3-0247	0.019	0.03

Comment 10:

American Steel Foundries requested that the testing requirement for the Nine (9) Spring Grinders allow for testing under normal operating conditions because it is unrealistic for all nine grinders to be operating at maximum rate simultaneously.

Response:

Operating at least at 95% of maximum capacity is a requirement of 326 IAC 3-6-3 - Emission testing. This request was denied because American Steel Foundries had demonstrated during previous compliance testing that it is feasible to operate all nine grinders at maximum rates simultaneously.

Comment 11:

American Steel Foundries commented that there is no stack on the Large, Medium, and Small Line Coil Manufacturing Processes and thus, the visible emission notation requirements for these stacks should be removed.

Response:

Based on information contained in their application and inspections performed by HDEM, the units <u>do</u> have stacks, therefore, the request is denied.

Comment 12:

American Steel Foundries commented that the daily monitoring of amp meter readings for each of the electrostatic precipitator for the Large, Medium, and Small Line Coil Manufacturing Processes would not be a useful tool for Compliance Monitoring. The Company performed a study and found no change in amp readings from the time the cartridges for the electrostatic precipitator were freshly installed (clean) and up to the time when they were removed for cleaning. The source proposed to monitor the hours of operation of the electrostatic precipitators and to clean the electrostatic precipitators and cartridges after 400 hours or less of operation.

Response:

The proposal was acceptable to HDEM and the permit was revised to reflect the change in the monitoring requirement. Subsequently, with the change in the monitoring requirements, D.4.7 (a) and (b) – Record Keeping Requirements were also revised. The appropriate changes, similar to those shown for the Large

Line Coil Spring Manufacturing Process, were also made for the Medium and Small Line Coil Spring Manufacturing Processes.

D.4.5 Visible Emissions Notations

(a) Visible emission notations of the Electrostatic Precipitator (No. 3-3036) stack exhaust shall be performed at least once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

D.4.6 Parametric Monitoring

The Permittee shall monitor the amperage of the fan motor of the electrostatic precipitator used in conjunction with the Large Line Coil Spring Manufacturing Process, at least once daily when the process is in operation. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the amperage is outside of the normal range as recommended by the manufacturer. In order to comply with D.4.1, the Permitee shall monitor the hours of operation of this facility and clean the Electrostatic Precipitator (Unit ID 3-3036) and cartridges after 400 hours or less of operation.

D.4.7 Record Keeping Requirements

- (a) To document compliance with Condition D.4.5, the Permittee shall maintain records of daily visible emission notations of the Electrostatic Precipitator (No. 3-3036) stack exhaust.
- (b) To document compliance with Condition D.4.6, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Fan Amperagerecords of the hours of operation of the electrostatic precipitator and the dates that the cartridges are cleaned.

Comment 13:

American Steel Foundries requested the certification requirement for the Sellers Boiler be changed from semi-annual to annual because this unit operates approximately from September through May for heating purposes only.

Response:

Regardless of the actual hours of operation, the unit has the potential to operate all year round. The natural gas certification is not based on hours of operation but is required in lieu of compliance monitoring. Thus, the certification requirement will be maintained.

Comment 14:

American Steel Foundries requested the removal of Condition D.8.5(b) because in order to view the stacks for the paint booths, employees must access the roof, which raises safety concerns. American Steel Foundries proposed to install redundant (double) particulate filters in the paint booth operation, install a meter on the spray booth operations that measures the time the spray guns are in operation, change the filters after every eight hours of spraying time, and check the air plenum each time the filters are changed.

Response:

This proposal is acceptable to HDEM and IDEM with some additional conditions incorporated. Additional conditions were taken from an already issued FESOP for a source located in La Porte, Indiana. Section D.8 was revised as follows:

D.8.5 Monitoring

- (a) Daily inspections and manometer readings shall be performed to verify the placement, integrity, and particle loading to the particulate filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while each booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) Redundant secondary particulate filter system shall be installed behind every primary particulate filter and, at each booth, a manometer reading of the secondary redundant filter system shall be recorded during each primary filter change to ensure that there is no overspray on the rooftops. Inspections of the plenum behind the secondary particulate filters shall be performed each time the secondary particulate filters are replaced. Monthly Inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground no less than once per quarter. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an overspray emission, evidence of overspray emission, or other abnormal emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.8.6 Visible Emissions Notations

- (a) Daily visible emission notations of the booth exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.76 Record Keeping Requirements

(a) To document compliance with Condition D.8.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.8.1.

- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
- (2) A log of the dates of useoperation;
- (3) The volume weighted VOC content of the coatings used for each month;
- (4) The cleanup solvent usage for each month;
- (5) The total VOC usage for each day; and
- (6) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.8.5, the Permittee shall maintain records of weekly overspray observations, daily inspections of the primary particulate filters and manometer readings across the primary filters, the manometer readings for the secondary particulate filters each time the primary filters are replaced, plenum filter inspections when the secondary particulate filters are replaced, quarterly rooftop inspections, and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) To document compliance with Condition D.8.6, the Permittee shall maintain records of daily visible emission notations of the booth exhaust.
- (dc) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

Upon further review by IDEM-OAQ and HDEM, the following revisions were made to the permit:

1. The rule cite, which is the definition of a major source in 326 IAC 2-7, was added to Section A.1 (General Information). Also, the phone number of the contact person has been deleted because it is cumbersome to do an administrative amendment in the event the phone number changes.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary Steel Spring Coils Manufacturing plant.

Responsible Official: R. E. Barker, President

Mailing Address: 10 South Riverside Plaza, Suite 1000

Chicago, Illinois 60601

(312) 258-8000

Contact Person: Robert Ribbing, Manager, Environmental Affairs

(312) 258-5459

Source Address: 4831 Hohman Avenue

Hammond, Indiana 46327

(219) 931-1900

2. To ensure continuous compliance, the frequency requirement for D.3.5, (Visible Emissions Notations) was changed from "once daily" to "once per shift". The changes were also made to D.4.5, D.5.5, and D.6.5 of the permit. The frequency requirement for D.3.6 (Parametric Monitoring) changed from "once weekly" to "once per shift". D.3.8(a) and (b)(1) were also revised to reflect the changes in D.3.5 and D.3.6 indicated above.

D.3.5 Visible Emissions Notations

(a) DailyvVisible emission notations of the Baghouse (Unit ID 3-3037) stack exhaust shall be performed at least once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

D.3.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the Nine Spring Grinders at least once weekly per shift when any one of the grinders is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports. A pressure reading that is outside of the above mentioned range for any one reading is not a deviation from this permit.

D.3.8 Record Keeping Requirements

- (a) To document compliance with Condition D.3.5, the Permittee shall maintain records of daily visible emission notations of the Baghouse (Unit ID 3-3037) stack exhaust.
- (b) To document compliance with Condition D.3.6, the Permittee shall maintain the following:

- (1) Daily Records of the following operational parameters during normal operation when venting to the atmosphere:
- 3. Language about failure to take response steps was added to D.3.5, D.4.5, D.5.5, and D.6.5 (Visible Emission Notations) paragraph (e), D.3.6 (Parametric Monitoring), and D.3.7 (Broken or Failed Bag Detection) paragraph (a) to clarify that not taking a response step will be considered a permit violation. In addition, Section C.19 Compliance Monitoring Plan Failure to Take Response Steps has changed to Section C.19 Compliance Response Plan Preparation, Implementation, Records, and Reports.

D.3.5 Visible Emissions Notations

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Failure to take response steps in accordance with Section C – Compliance Response Monitoring Plan – Failure to Take Response Steps Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.4.5 Visible Emissions Notations

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Failure to take response steps in accordance with Section C – Compliance Response Monitoring Plan – Failure to Take Response Steps Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.5.5 Visible Emissions Notations

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Failure to take response steps in accordance with Section C – Compliance Response Monitoring Plan – Failure to Take Response Steps Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.6.5 Visible Emissions Notations

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Failure to take response steps in accordance with Section C – Compliance Response Monitoring Plan – Failure to Take Response Steps-Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.6 Parametric Monitoring

The Permittee shall monitor the total static pressure drop across the baghouse used in conjunction with the Nine Spring Grinders, at least once weekly when any one of the nine grinders is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside

of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C – Compliance Response Monitoring Plan – Failure to Take Response Steps Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments shall be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Monitoring Plan Failure to Take Response Steps Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- 4. The last line of Section A.2(4) and Facility Description box for the Large Line Coil Spring Manufacturing Process was reworded to clarify the purpose of the electrostatic precipitator. The appropriate change, similar to what was made to the Large Line Coil Spring Manufacturing Process, was also made to the Medium and Small Line Coil Spring Manufacturing Processes and their respective D-sections.
 - a. Section A.2(4) Large Line Coil Spring Manufacturing Process was revised as follows:

This process includes a draw furnace (No. 2-5164) which is used to stress-relieve the newly coiled springs and an oil quench tank (No. 3-2845). The maximum design rate of coil springs manufactured is 10,000 lbs/hr. The Draw Furnace is natural gas-fired only and has a maximum design capacity of 9.8 MMBtu/hr heat input. Particulate emissions from the quench tank (oil mists) generated during the quenching operation are controlled by an Electrostatic Precipitator (No. 3-3036).

b. The Facility Description of Section D.4 of the Part 70 Permit was revised as follows:

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Large Line Coil Spring Manufacturing Process including a draw furnace (No. 2-5164) used to stress-relieve the newly coiled springs and an oil quench tank (No. 3-2845). The maximum design rate of coil springs manufactured is 10,000 lbs/hr. The Draw Furnace is natural gas-fired only and has a maximum design capacity of 9.8 MMBtu/hr heat input. Particulate emissions from the quench tank-(oil mists) generated during the quenching operation are controlled by an Electrostatic Precipitator (No. 3-303628).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

5. IDEM-Office of Air Management (OAM) was changed to IDEM-Office of Air Quality (OAQ). All references to OAM in the permit have been changed to OAQ.

6. Condition B.1 (Permit No Defense) has been deleted. This is not in IC 13, but IDEM does have the general authority for this in 326 IAC 2-7-15. Therefore, most of this language has been added to Condition B.14 (Permit Shield). Condition B.14 provides for when the possession of a permit does provide a defense and provides that it is only for those requirements in existence at the time of permit issuance. All other B conditions have been re-numbered as a result of this change.

B.1 Permit No Defense [IC 13]

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."
- 7. Language was added to Condition B.2 (Permit Term) to clarify that amendments, revisions or modifications do not extend the expiration date of the permit. The expiration date will always be 5 years from the issuance date of the original permit. The expiration date needs be typed in the signature box as well. In addition, a new rule cite has been added 326 IAC 2-1.1-9.5.
 - B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the <u>effective original</u> date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. **Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.**

	Expiration Date:
Issued by:	
Ronald L. Novak, Director Hammond Department of Environmental Management	

- 8. Condition B.7 (Duty to Supplement and Provide Information) was reworded to change a rule reference and to match the language in the rule.
 - B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]
 - (c) Upon request, the Permittee shall also furnish to IDEM-OAQ, and HDEM copies of records required to be kept by this permit. If tThe Permittee wishes to assert may include a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM-OAM and HDEM along with a claim of confidentiality under in accordance with 326 IAC 17. If requested by IDEM-OAQ, or the U.S. EPA, to When furnishing copies of requested records directly to U.S. EPA, then the Permittee must furnish record directly to the U.S.

EPA. the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

- 9. Item (c) was added to Condition B.8 (Compliance with Permit Conditions) to clarify that an emergency does constitute an affirmative defense in an enforcement action if the Permittee complies with the emergency procedures.
 - B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]
 - (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.
- 10. Item (b) of Condition B.9 (Certification) was modified to clarify when a certification is needed.
 - B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]
 - (b) One (1) certification shall be included, on using the attached Certification Form, with each submittal requiring certification.
- 11. Paragraph (a) of Condition B.10 (Annual Compliance Certification) was revised to clarify that the initial certification is from the date of issuance until Dec. 31. In addition, the section for which the certification has to be sent was changed from Compliance Section to Compliance Branch.
 - B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]
 - (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. The All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management Compliance Section Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- 12. Record keeping requirements were added to Condition B.11 (Preventive Maintenance Plan).
 - B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
 - (c) A copy of the PMPs shall be submitted to IDEM-OAQ and HDEM upon request and within a reasonable time, and shall be subject to review and approval by IDEM-OAQ and HDEM. IDEM-OAQ and HDEM may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or HDEM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or HDEM within a reasonable time.
- 13. Reference to the Emergency Occurrence Report Form was added to Item (b)(5) of Condition B.12 (Emergency Provisions). The emergency form is for emergencies only, and is no longer an emergency and deviation form. All deviations will now be reported on the Quarterly Deviation and Compliance Monitoring Report. Paragraph (d) part of the first sentence has been deleted. Since we know it is a TV source, then we also know the malfunction rule has been superseded by the emergency rule. Paragraph (f) "compliance" has been changed to "accordance". In addition, (a), (b), and (g) were revised to reflect rule changes to 326 IAC 2-7-16. This section of the rule is now consistent with 40 CFR 70.6(g) and provides and affirmative defense to an action brought for non-compliance with technology-based emission limitations only.
 - B.12 Emergency Provisions [326 IAC 2-7-16]
 - (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
 - (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent notice, either in writing by mail or facsimile, of the emergency to:
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (f) Failure to notify IDEM-OAQ and HDEM by telephone or facsimile of an emergency lasting more than one (1) hour in compliance accordance -with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
 - (g) Operations may continue during an emergency only if the following conditions are met:
 - (1)——If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
- (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

- 14. Some of the language from Condition B.1 was added to Condition B.13 (Permit Shield). Some of the language was removed from Condition B.13(d) because it is unnecessary and would be contradictory to operating permits revision procedures. Construction permit terms are covered in the definition of applicable requirements. In addition, item (b) was removed from B.13. Since B.14 (Prior Permit Conditions Superseded) was added to the permit, it is not necessary for this statement to be in this condition.
 - B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]
 - (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15. Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM-OAQ or HDEM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until

the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

- 15. Condition B.14 Multiple Exceedances was removed because 326 IAC 2-7-5-(1)(E) was repealed.
 - B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter establehed to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

- 16. Condition B.14 (Prior Permit Conditions Superseded) was added to the permit to clarify the intent of the new rule 326 IAC 2-1.1-9.5.
 - B.14 Prior Permit Conditions Superseded [326 IAC 2-1.1-9.5]
 - (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated;
 - (2) revised; or
 - (3) deleted

by this permit.

- (b) All previous registrations and permits are superseded by this permit.
- 17. Condition B.15 (Deviations from Permit Requirements and Conditions) was revised to show that sources are no longer required to report deviations in 10 days. Now they will report deviations quarterly on the Quarterly Deviation and Compliance Monitoring Report. References to the emergency report were removed since deviations will not be reported on that form anymore. There is no longer a 5% exception for reporting deviations, since the 10-day notification has been relaxed to a quarterly report.

The reference to Compliance Data Section was also added.

In addition, EPA made it clear that there cannot be a requirement to do something in a permit, then say it is not a deviation when the source does not do it (see 40 CFR 70.6(a)(6)I). An exemption cannot be created through the T5 permit. Section D.3.6 Parametric Monitoring (and all other parametric monitoring conditions was revised to clarify the facility-specific events that would not qualify as a deviation.

- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
 - (a) Deviations from any permit requirements (for emergencies see Section B Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance **Data** Section, Office of Air Quality

within ten (10) calendar days from the date of the discovery of the deviation using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. except for the failure to perform the monitoring or record the information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter. Deviations that are required to be reported by an applicable requirement A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit shall be reported according to the schedule stated in the applicable requirement and de does not need to be included in this report.

The notification by the Permittee Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3)(2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

D.3.6 Parametric Monitoring

The Permittee shall monitor record the total static pressure drop across the baghouse used in conjunction with the Nine Spring Grinders at least once daily per shift when any one of the nine grinders is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, When for any one reading, the pressure drop across the baghouse shall be maintained within is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Monitoring Response Plan – Failure to Take Response Steps Preparation, Implementation, Records, and Reports for this unit shall contain trouble shooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. A pressure reading that is outside of the above mentioned range for any one reading is not a deviation from this permit. Failure to take response steps in accordance with Section C – Compliance Monitoring Response Plan – Failure to Take Response Steps Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

- 18. The word "and" in Condition B.16 (Permit Modification, Reopening, Revocation and Reissuance, or Termination) was changed to "or" since the reopening could be done by either the local or the state agency.
 - B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]
 - (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM-OAQ and or HDEM at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM-OAQ and or HDEM may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]
- 19. Condition B.18 (Permit Amendment or Modification) was revised to clarify that 326 IAC 2-7-4(f) requires all applications to be certified by the responsible official. EPA has also requested this change.
 - B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
 - (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34)-only if a certification is required by the terms of the applicable rule.

- 20. Item (b) of Condition B.20 (Operational Flexibility) was reorganized. Paragraph (b)(1) was removed to make the condition consistent with the language in the rule.
 - B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
 - (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). and the following additional conditions:
 - (1) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).
 - For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (A)(1) A brief description of the change within the source;
 - (B)(2) The date on which the change will occur;
 - (C)(3) Any change in emissions; and
 - (D)(4) Any permit term or condition that is no longer applicable as a result of the change.

- 21. 326 IAC 2 was added to Section B.21 (Source Modification Requirement) to make the condition more complete. The language "applicable provisions" was removed because it is unnecessary.
 - B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the applicable provisions of 326 IAC 2 and 326 IAC 2-7-10.5.

- 22. The phrase "At reasonable times" was removed from Condition B.22 (Inspection and Entry) because neither the rule nor the statute limits the agencies from requesting such items at any time. Items b, c, d, and e, and the heading of Condition B.22 were revised as follows:
 - B.22 Inspection and Entry [326 IAC 2-7-6(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM-OAQ and HDEM U.S. EPA, or an authorized representative to perform the following:

- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]
- 23. Condition B.23 (Transfer of Ownership or Operational Control) was revised to clarify that 326 IAC 2-7-4(f) requires all applications to be certified by the responsible official. EPA has also requested this change.
 - B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
 - (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management 5925 Calumet Avenue

Hammond, Indiana 46320

The application which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- 24. The following rule cites were added to paragraphs (a) and (b) of Condition B.24 (Annual Fee Payment).
 - B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]
 - (a) The Permittee shall pay annual fees to IDEM OAQ and HDEM within thirty (30) calendar days of receipt of a billing. Pursuant 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM OAQ or HDEM the applicable fee is due April 1 of each year.
 - (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- 25. Condition C.5 (Fugitive Dust Emissions) the fugitive dust plan will be included as an attachment to the permit. Therefore, only the requirements of the rule will be listed in the permit.
 - C.5 Fugitive Dust Emissions [326 IAC 6-1-11.1]

The Permittee shall be in violation of 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), if the opacity of fugitive particulate emissions exceeds ten percent (10%). Compliance with this opacity limit shall be achieved by controlling fugitive particulate matter emissions according to the plan submitted. The plan does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). The plan consists of:

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan.

- 26. A condition for Lake County Particulate Matter Contingency Measures 326 IAC 6-1-11.2 was added to the permit because the source is located in Lake County and this rule applies.
 - C.6 Lake County Particulate Matter Contingency Measures [326 IAC 6-1-11.2]

The Permittee shall comply with the applicable provisions of 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures).

- 27. Language was added to Condition C.8 (Stack Height) to clarify which parts of 326 IAC 1-7 are not federally enforceable.
 - C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

- 28. The rule cite in the title for Condition C.9 (Asbestos Abatement Projects) was changed to make it more generalized. In addition, C.9 was revised to clarify that asbestos notification must be certified by the owner or operator and not the responsible official.
 - C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140] [40 CFR 61, Subpart M]
 - (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- 29. The word "within" in Condition C.10(c) (Performance Testing) was changed to "not later than". Also, Condition C.10(a) was updated to reference Compliance Data Section.
 - C.10 Performance Testing [326 IAC 3-6]
 - (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM-OAO

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance **Data** Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM-OAQ and HDEM within not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM-OAQ and HDEM, if the source submits to IDEM-OAQ a reasonable written explanation within not later than five (5) days prior to the end of the initial forty-five (45) day period.
- 30. Language was added to Condition C.12 (Compliance Monitoring) to clarify that the permit will specify when compliance monitoring does not have to start in 90 days. There are times when MACT requires compliance monitoring that the source does not have to comply with yet. The same idea applies to new units, if the MACT does not apply yet, we would not expect the source to start compliance monitoring.
 - C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

- 31. A condition for the requirements of Continuous Compliance Plan (CCP) was added to the permit because the source is located in Lake County and the rule applies to it.
 - C.13 Continuous Compliance Plan [326 IAC 6-1-10.1(I)]

Pursuant to 326 IAC 6-1-10.1(I) (Lake County PM10 Emission Requirements), the Permittee shall submit to IDEM-OAQ and HDEM, and maintain at the source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring, and record keeping requirements as specified in 326 IAC 6-1-10.1(p) through (r) or according to the Permittee's CCP.

- 32. Condition C.14 (Maintenance of Emission Monitoring Equipment) was modified to clarify the intent of the rule.
 - C.14 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
 - (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequently often than once an hour until such time as the continuous monitor is back in operation.
- 33. Additional rule cites were added to Condition C.15 (Monitoring Methods).
 - C.15 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

- 34. Additional rule cites were added to Condition C.16 (Pressure Gauge Specifications). Language was added for other instrument specifications.
 - C.16 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
 - (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
 - (b) The Permittee may request the IDEM-OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

- 35. Items (c) and (d) were deleted from Condition C.17 (Emergency Reduction Plans) because if the ERP has already been submitted, the information required by the ERP does not need to be listed in the permit.
 - C.17 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on February 11, 1991.
- (b) If the ERP is disapproved by IDEM OAQ and HDEM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (c) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (d) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
 - (e)(c) Upon direct notification by IDEM OAQ and HDEM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]
- 36. If a source is subject to 40 CFR 68, Condition C.18 (Risk Management Plan) states the need to submit a Risk Management Plan.
 - C.18 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68-by the date provided in 40 CFR 68.10(a); or
- 37. Item (f) of Condition C.19 (Compliance Monitoring Plan Failure to Take Response Steps) was revised to show that a Part 70 permit does not allow an excuse from reporting failures IDEM may use discretion but may not create exemption through the permit. The rest of the changes are needed to re-organize the condition and clarify its intent.
 - C.19 Compliance Monitoring Response Plan Failure to Take Response Steps Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) The Permittee is required to prepare implement: a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information

contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:

- (1) This condition;
- (2) The Compliance Determination Requirements in Section D of this permit;
- (3) The Compliance Monitoring Requirements in Section D of this permit;
- (4) The Record Keeping and Reporting Requirements in Sectioon C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
- (5) Aa Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP's shall be submitted to IDEM-OAQ and HDEM upon request and shall be subject to review and approval by IDEM-OAQ and HDEM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, and maintained on site, and is-comprised of:
 - (1) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit, and an expected timeframe for taking reasonable steps.
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows: Failure to take reasonable response steps may constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the The Permittee is excused from taking not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
- (d)(e) Records shall be kept of all instances in which the compliance related information was not met and all response steps taken. The Permittee shall record all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e)(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed at all times—when the

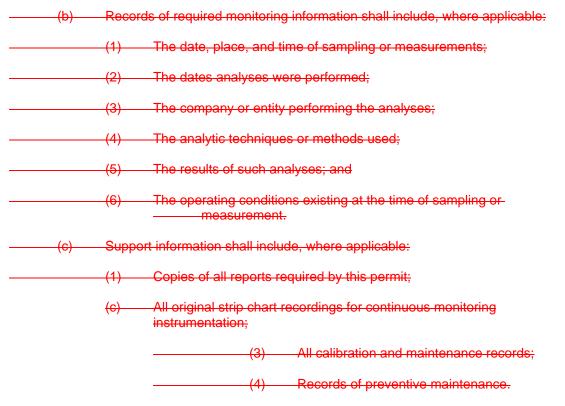
equipment emission unit is operating, except for time necessary to perform quality assurance and maintenance activities. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.

- (f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.
- 38. Condition C.20 (Actions Related to Noncompliance Demonstrated by a Stack Test) was revised to clarify that notification sent in response to non-compliance with a stack test now requires certification by the responsible official.
 - C.20 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (c) IDEM-OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- 39. The term "estimated" was added to Items (a)(1) and (a)(2) of Condition C.21 (Emission Statement) because that is how emissions are described in 326 IAC 2-6.
 - C.21 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
 - (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate **estimated** actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate **estimated** actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- 40. The term "monitoring" was removed from Condition C.22 (General Record Keeping Requirements) so that the condition will be more generalized to all record keeping. The term "reports" was added to clarify that the source must keep copies of those as well. Items (b) and (c) were removed because they were unnecessary.
 - C.22 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
 - (a) Records of all required monitoring data, reports, and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the

source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or HDEM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or HDEM within a reasonable time.



- (d)(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- 41. The Semi-Annual Compliance Monitoring Report is now the Quarterly Deviation and Compliance Monitoring Report. References to the emergency report were removed from Condition C.23 (General Reporting Requirements) because all the information is in Condition B.13. In (d) we have clarified that the report does need to be certified by the responsible official. This change is also reflected in all the D sections and the reporting forms. EPA has also requested this change. In addition, Condition C.23(b) was updated to reference the Compliance Data Section.
 - C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]
 - (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit. The source shall submit a the attached Quarterly-Semi-Annual Deviation and Compliance Monitoring Report or its equivalent. Any deviation from the permit requirements, and, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance **Data** Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g)(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.
- 42. Condition D.3.3 (Testing Requirements) was revised to clarify that test methods should not be specified in the permit. All test methods have to be approved by Compliance Data Section when a protocol is submitted. Language was added to clarify which condition specifies that testing is needed to show compliance.
 - D.3.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

During the period between **30 and 36 months** after issuance of this permit, **in order to demonstrate compliance with Condition D.3.1**, the Permittee shall perform PM-10 testing utilizing **Methods 201 or 201A**, or other methods as approved by the Commissioner. This test shall be repeated at least once every **five (5) years** from the date of this valid compliance demonstration. **PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C – Performance Testing.** In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

- 43. The last sentence was removed from Conditions D.8.3 and D.9.2 (Volatile Organic Compounds (VOC)); it is unnecessary since we have Condition C.11 (Compliance Requirements).
 - D.8.3 Volatile Organic Compounds

Compliance with the VOC content and usage limitations contained in Condition D.8.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. However, IDEM - OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.9.2 Volatile Organic Compounds

Compliance with the VOC content and usage limitations contained in Condition D.9.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. However, IDEM - OAQ, reserves

the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

44. Language was added to Conditions D.3.4, D.4.4, D.5.4, and D.6.4 (Particulate Matter (PM)) to clarify which condition specifies the use of a PM control device for compliance.

D.3.4 Particulate Matter (PM)

Pursuant to 326 IAC 2-7-6 and in order to comply with D.3.1, the Baghouse (Unit ID 3-3037) for PM control shall be in operation and control emissions from this facility at all times when any of the nine grinders is in operation.

D.4.4 Particulate Matter (PM)

Pursuant to 326 IAC 2-7-6 and in order to comply with D.4.1, the Electrostatic Precipitator (Unit ID 3-3036) for PM control shall be in operation and control emissions from the quench portion of this facility at all times when the Large Line Coil Spring Manufacturing unit is in operation.

D.5.4 Particulate Matter (PM)

Pursuant to 326 IAC 2-7-6 and in order to comply with D.5.1, the Electrostatic Precipitator (Unit ID 3-3027) for PM control shall be in operation and control emissions from the quench portion of this facility at all times when the Medium Line Coil Spring Manufacturing unit is in operation.

D.6.4 Particulate Matter (PM)

Pursuant to 326 IAC 2-7-6 and in order to comply with D.6.1, the Electrostatic Precipitator (Unit ID 3-3024) for PM control shall be in operation and control emissions from the quench portion of this facility at all times when the Small Line Coil Spring Manufacturing unit is in operation.

- 45. Condition D.7.5 (Reporting Requirements) was revised to clarify that the reports require certification by the responsible official. Part 70 requires <u>all</u> reports to be certified. EPA has also requested this change.
 - D.7.5 Record Keeping and Reporting Requirements

A semi-annual summary of the natural gas fired boiler certification, shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six-month period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

46. The Emergency/Deviation Occurrence Report form is now called the Emergency Occurrence Report. All references to deviations have been removed. These forms should be sent to the Compliance Branch, not the Compliance Data Section. EPA has agreed to allow the 2-day notification to come in without the responsible official certification as long as the emergencies are included in the Quarterly Deviation and Compliance Monitoring Report. That report, certified by

the responsible official, therefore, will comply with the Part 70 requirement to have all reports certified.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE Data Section BRANCH

P.O. Box 6015 100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

ax: 317-233-596*1* and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

AIR POLLUTION CONTROL DIVISION

5925 Calumet Avenue Hammond, Indiana 46320 Phone: 219-853-6306 Fax: 219-853-6343

PART 70 OPERATING PERMIT

Emergency/Deviation Occurrence Report-EMERGENCY OCCURRENCE REPORT

- 47. The monthly and quarterly reports will now need to be certified by the responsible official, therefore, the last line in each of these reports was changed from "A certification is not required for this report." to "Attach a signed certification to complete this report".
- 48. The Quarterly or Semi-Annual Compliance Monitoring Report is now called the Quarterly Deviation and Compliance Monitoring Report. The form now requires the source to not only report that there were deviations, but to also include the probable cause and the response steps taken. The sources are no longer required to report deviations in ten days, therefore, every source will need to submit this report quarterly. For sources with an applicable requirement which gives an alternate schedule for reporting deviations, those deviations will not need to be reported quarterly, but instead should be reported according to the schedule in the applicable requirement.

In addition, the form was updated to clarify that the report has to be submitted to the IDEM-OAQ's Compliance Data Section.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AIR POLLUTION CONTROL DIVISION

PART 70 OPERATING PERMIT

SEMI-ANNUAL COMPLIANCE MONITORING REPORT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

 Reference to Branch or Section was removed from the Certification Form since it is used for multiple purposes.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE BRANCH

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AIR POLLUTION CONTROL DIVISION

PART 70 OPERATING PERMIT CERTIFICATION

50. The Natural Gas Boiler Certification Form was updated to reference Compliance Data Section.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE DATA SECTION

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AIR POLLUTION CONTROL DIVISION

PART 70 OPERATING PERMIT NATURAL GAS FIRED BOILER CERTIFICATION

- 51. Compliance Monitoring Conditions were added to Sections D.14 and D.15 to ensure continuous compliance.
 - D.14.2 Testing Requirements [326 IAC 2-7-6(1)] Preventive Maintenance Plan [326 IAC 2-7-5(13)]

The Permittee is not required to test this facility by this Permit. However, if testing is required, compliance with the (PM10) limit specified in Condition D.14.1 shall be determined by a performance test conducted in accordance with Section C — Performance Testing. A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its baghouse.

D.14.3 Record Keeping and Reporting Requirements Particulate Matter (PM)

There are no record keeping and reporting requirements for this facility. Pursuant to 326 IAC 2-7-6 and in order to comply with D.3.1, the Baghouse (Unit ID 3-3017) for PM control shall be in operation and control emissions from this facility at all times when the Pangborn Shot Peener is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.14.4 Visible Emissions Notations

(a) Visible emission notations of the Baghouse (Unit ID 3-3017) stack exhaust shall be performed at least once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

D.14.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the Pangborn Shot Peener at least once per shift when the Pangborn Shot Peener is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports. A pressure reading that is outside of the above mentioned range for any one reading is not a deviation from this permit. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM-OAQ and HDEM and shall be calibrated at least once every six (6) months.

D.14.6 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.14.7 Record Keeping Requirements

- (a) To document compliance with Condition D.14.4, the Permittee shall maintain records of visible emission notations of the Baghouse (Unit ID 3-3017) stack exhaust.
- (b) To document compliance with Condition D.14.5, the Permittee shall maintain the following:
 - (1) Records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.15.2 Testing Requirements [326 IAC 2-7-6(1)] Preventive Maintenance Plan [326 IAC 2-7-5(13)]

The Permittee is not required to test this facility by this Permit. However, if testing is required, compliance with the (PM10) limit specified in Condition D.14.1 shall be determined by a performance test conducted in accordance with Section C — Performance Testing. A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its baghouse.

D.15.3 Record Keeping and Reporting Requirements Particulate Matter (PM)

There are no record keeping and reporting requirements for this facility. Pursuant to 326 IAC 2-7-6 and in order to comply with D.3.1, the Baghouses (Unit IDs 3-1811, 3-3022, and 3-1823) for PM control shall be in operation and control emissions from this facility at all times when any of the Wheelabrator Shot Peeners is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.15.4 Visible Emissions Notations

- (a) Visible emission notations of the Baghouse (Unit IDs 3-1811, 3-3022, and 3-1823) stack exhaust shall be performed at least once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

D.15.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the Wheelabrator Shot Peeners at least once per shift when any one of the Wheelabrator Shot Peeners is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports. A pressure reading that is outside of the above mentioned range for any one reading is not a deviation from this permit. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM-OAQ and HDEM and shall be calibrated at least once every six (6) months.

D.15.6 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.15.7 Record Keeping Requirements

- (a) To document compliance with Condition D.15.4, the Permittee shall maintain records of visible emission notations of the Baghouse (Unit IDs 3-1811, 3-3022, and 3-1823) stack exhaust.
- (b) To document compliance with Condition D.15.5, the Permittee shall maintain the following:
 - (1) Records of the following operational parameters during normal operation when venting to the atmosphere:
 - (C) Inlet and outlet differential static pressure; and
 - (D) Cleaning cycle operation.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

- 51. The Table of Contents was revised to reflect the changes made to the permit.
 - A. Added new rule cites for B.2 and B.14
 - B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]
 - B.14 Prior Permit Conditions Superseded [326 IAC 2-1.1-9.5]
 - B. Revised to reflect change in C.19.
 - C.19 Compliance Monitoring Response Plan Failure to Take Response Steps Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
 - C. Revised to reflect the addition of new conditions and deletion of existing conditions for the Shotpeeners Sections D.14 and D.15.
 - D.14.3 Record Keeping and Reporting Requirements Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.14.4 Visible Emissions Notations
- D.14.5 Parametric Monitoring
- D.14.6 Broken or Failed Bag Detection
- D.14.7 Record Keeping Requirements
- D.15.3 Record Keeping and Reporting Requirements Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.15.4 Visible Emissions Notations
- D.15.5 Parametric Monitoring
- D.15.6 Broken or Failed Bag Detection
- D.15.7 Record Keeping Requirements

Indiana Department of Environmental Management Office of Air Management and

Hammond Department of Environmental Management Air Pollution Control Division

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: American Steel Foundries – Hammond Plant Source Location: 4831 Hohman Avenue, Hammond, Indiana 46327

County: Lake County

SIC Code: 3493 – Steel Springs, except wire

Operation Permit No.: T089-8273-00204
Permit Reviewer: Lito Biscocho, HDEM

The Hammond Department of Environmental Management, Air Pollution Control Division, has reviewed a Part 70 permit application from American Steel Foundries – Hammond Plant relating to the operation of a Steel Springs Manufacturing Plant.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(1) 50-Ft. Bar Furnace (Unit ID 2-5027)

Screw furnaces are used to heat the entire bar prior to coiling. This unit has a maximum design capacity of 20.5 MMBtu/hr heat input and is natural gas-fired only.

(2) Medium Screw Furnace (Unit ID 2-5075)

Screw furnaces are used to heat the entire bar prior to coiling. This unit has a maximum design capacity of 13.0 MMBtu/hr heat input and is natural gas-fired only.

(3) Nine (9) Spring Grinders

This system includes the following grinders:

Unit ID (Unit Description) Ma	ximum Design Rate (Tons of springs ground per hour)
Unit 3-0386 (#2 Besly Ferris Wheel Grinde	r) 1.6555 (for both Units 3-0386 & 3-0389, combined)
Unit 3-0389 (Gardner Tub Grinder)	
Unit 3-0385 (#1 Besly Ferris Wheel Grinde	r) 2.2035 (for Units 3-0385, 3-0394, & 3-0233, combined)
Unit 3-0394 (Besly Swing Grinder)	
Unit 3-0233 (Gardner Single End Grinder)	
Unit 3-0249 (Gardner Paddle Wheel Grind	er) 1.545
Unit 3-0247 (Torrington Ferris Wheel Grind	der) 0.909
Unit 3-0244 (#1 Mattison (Large) Grinder)	4.309 (for both Units 3-0244 & 3-0393, combined)
Unit 3-0393 (#2 Mattison (Small) Grinder)	

All nine units share an ETA 2000 Pulse-jet baghouse (Unit No. 3-3037).

(4) Large Line Coil spring Manufacturing Process

This process includes a draw furnace (No. 2-5164) which is used to stress-relieve the newly coiled springs and an oil quench tank (No. 3-2845). The maximum design rate of coil springs manufactured is 10,000 lbs/hr. The Draw Furnace is natural gas-fired only and has a maximum design capacity of 9.8 MMBtu/hr heat input. Particulate emissions from the quench tank are controlled by an Electrostatic Precipitator (No. 3-3028).

(5) Medium Line Coil Spring Manufacturing Process

This process includes a draw furnace (No. 2-5097) which is used to stress-relieve the newly coiled springs and an oil quench tank (No. 3-2838). The maximum design rate of coil springs manufactured per hour is 6,000 lbs. The Draw Furnace is natural gas-fired only and has a maximum design capacity of 5.1 MMBtu/hr heat input. Particulate emissions from the quench tank are controlled by an Electrostatic Precipitator (No. 3-3027).

(6) Small Line Coil Spring Manufacturing Process

This process includes a draw furnace (No. 2-5163) which is used to stress-relieve the newly coiled springs and an oil quench tank (No. 3-2821). The maximum design rate of coil springs manufactured per hour is 3,000 lbs. The Draw Furnace is natural gas-fired only and has a maximum design capacity of 5.1 MMBtu/hr heat input. Particulate emissions from the guench tank are controlled by an Electrostatic Precipitator (No. 3-3024).

(7) Sellers Boiler No. 4-5509

This unit is used for spaceheating and to keep the quench oil fluid during colder weather. It has a maximum design capacity of 10.5 MMBtu/hr heat input and is natural gas-fired only.

(8) Spray Painting Operation (Booths 3-2714 and 3-2715)

Booth 3-2715 is used to spray black paint (Crawford Water-based Enamel) on slider assemblies only. Booth 3-2714 is used to coat springs. Coatings used are John Deere Green and tan.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

(1) Spring Coating Dip Operation

This facility was constructed in 1947. This operation includes the following units:

- (a) Dip Coating Stations 3-2865 and 3-2813 (Location: By Final Inspection Area). These dip coating stations are used to apply a clear coat (Valvoline Tectyl 300G clear coat) on finished springs. This coating is thinned with a mixture of water and glycol ether.
- (b) Dip Coating Station 2865A (Location: By old tumbler/shotpeener Medium Spring Line Area). This station is used to apply a clear coat (Valvoline Tectyl 300G clear coat) on finished springs. This coating is thinned with a mixture of water and glycol ether.

American Steel Foundries – Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327 Permit Reviewer: Lito Biscocho, HDEM Page 3 of 11 T089-8273-00204 TSD

(c) Dip Coating Stations 3-2867, 3-2868, and 3-2869 (Location: By Medium Magnaflux Area by the Torrington Grinder). 3-2867 is used to apply a clear coat (Valvoline Tectyl 300G clear coat) thinned with a mixture of water and glycol ether. 3-2869 is used to apply a rust protectant (Daubert NOX RUST X-110) on finished springs. The Daubert NOX RUST X-110 rust protectant is thinned with Kwik-Dry 66. 3-2868 is used to coat the springs with quench oil.

(d) Dip Coating Stations 3-2870, 3-2871, and 3-2872 (Location: Large Magnaflux Area Northeast corner of the plant). 3-2870 is used to apply a clear coat (Valvoline Tectyl 300G clear coat) thinned with a mixture of water and glycol ether on finished springs. 3-2871 holds rust preventative coating (Daubert NOX RUST X-110) thinned with Kwik-Dry 66. 3-2872 holds guench oil.

Emission Units and Pollution Control Equipment

There are no new unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(20):

(1) Small Screw Furnace (Unit ID 2-5085)

Screw furnaces are used to heat the entire bar prior to coiling. This unit has a maximum design capacity of 8.0 MMBtu/hr heat input and is natural gas-fired only.

(2) Large Slot Furnace (Unit ID 2-5036)

The slot furnace is used to heat bar ends prior to tapering. This unit has a maximum design capacity of 2.5 MMBtu/hr heat input and is natural gas-fired only.

(3) Slot Furnaces (Medium Line) (Unit Ids 2-5014 and 2-5015)

The slot furnaces are used to heat bar ends prior to tapering. These units have a combined maximum design capacity of 5.2 MMBtu/hr heat input and are natural gas-fired only.

(4) Slot Furnace (Small Line) (Unit Id 2-5006)

The slot furnace is used to heat bar ends prior to tapering. This unit has a maximum design capacity of 1.5 MMBtu/hr heat input and is natural gas-fired only.

(5) Pangborn Shot Peener (Unit No. 3-1804)

This unit is used to clean scale and rust from coil springs using steel shots. Particulate emissions are controlled by a baghouse (No. 3-3017).

(6) Three (3) Wheelabrator Shot Peeners

Wheelabrator Shot Peeners (No. 3-1811, 1821, and 3-1823) are used to clean scale and rust from coil springs using steel shots. Each unit is controlled by its own baghouse (No. 3-1811, 3-3022, and 3-1823, respectively).

(7) Space Heaters, process heaters, or boilers using the following fuels.

Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.

- (8) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (9) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brasing equipment, cutting torches, soldering equipment, welding equipment.
- (10) Quenching operations used with heat treating processes.
- (11) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.
- (12) Paved and unpaved roads and parking lots with public access.

Existing Approvals

The source has been operating under the following approvals:

(1) Operation Permits No. 00344 through 00365, issued on March 19, 1996. All of these permits expired on December 31, 1996.

Enforcement Issue

- (a) IDEM and HDEM are aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled Unpermitted Emission Units and Pollution Control Equipment.
- (b) IDEM and HDEM are reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively incomplete Part 70 permit application for the purposes of this review was received **on** March 4, 1997. Additional information received on June 19, 1997, September 18, 1997, and September 22, 1997 which makes the Part 70 permit application administratively complete.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (21 pages total).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	958.887
PM-10	666.710
SO ₂	0.203
VOC	288.859
СО	10.851
NO _x	44.551

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Glycol Ether	189.839

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM and PM10 are equal to or greater than 100 tons per year and VOC equal to or greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects **1997** emission data as submitted by the applicant.

Pollutant	Actual Emissions (tons/year)
PM	0.685
PM-10	0.681
SO ₂	0.0267
VOC	22.598
CO	1.560
HAP (combination)	17.991
NO _x	6.241

Limited Potential to Emit

The table below summarizes the total limited potential to emit of the significant emission units.

				otential to Er ns/year)	nit		
Process/ facility	PM	PM-10	SO ₂	VOC	СО	NO _X	HAPs
50-Ft. Bar Furnace (Unit ID 2-5027)	0.70	0.70	0.051*				
Medium Screw Furnace (Unit ID 2- 5075)	0.70	0.70	0.033*				
Nine (9) Spring Grinders	9.1323	9.1323					
Large Line Coil Spring Manufacturing Process	15.33	15.33					
Medium Line Coil Spring Manufacturing Process	9.20	9.20					
Small Line Coil Spring Manufacturing Process	0.09	0.09					
Sellers Boiler No. 4-5509	0.131	0.131	0.026*				
Spray Painting Operation				62.9			
Spring Coating Dip Tanks				224.9			22.83
Insignificant Activities	3.854	3.854	0.043*				
Total Emissions	39.137	39.137	0.153*	287.8	•	- -	22.83

^{*}SO2 emissions are limited to 0.3 lbs/MMBtu in accordance with 326 IAC 7-4-1.1(b), however, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO2 emissions inherent with natural gas combustion is the allowable.

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	Moderate Nonattainment
SO ₂	Primary Nonattainment
NO_2	Severe Nonattainment
Ozone	Severe Nonattainment
CO	Unclassifiable/Attainment
Lead	Unclassifiable

(a) Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as severe nonattainment for ozone.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (1) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (2) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The Dip Tanks are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Kb Standards of Performance for Volatile Organic Liquid Storage Vessels), due to the date of construction (before July 23, 1984).
- (c) The Sellers Boiler is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), due to the date of construction (before June 9, 1989).
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-5 (Episode Alert Levels)

This source is subject to this rule because it has the potential to emit one hundred (100) tons per year or more of PM, PM10 and NOx. Pursuant to this rule, all persons responsible for the operation of an affected source shall prepare and implement an emergency reduction plan consistent with safe operating procedures. Upon direct notification by the commissioner or authorized representative that a specific air pollution episode level is in effect, the source shall immediately put into effect the actions stipulated in the approved ERP.

The source submitted an ERP on February 13, 1991.

326 IAC 2-2 (PSD Requirements) and 326 IAC 2-3 (Emission Offset)

This source is a major stationary source because it has the potential to emit VOCs at 25 TPY or more and PM, PM10, and NOx at 100 TPY or more. However, the source has not been reviewed under the requirements of 326 IAC 2-2 or 2-3 because there has not been a major modification, as defined in these rules, at this source subject to review under these rules.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than 10 tons per year of VOC and is located in Lake County, and it has the potential to emit more than 100 tons per year of PM, PM10, and NOx. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by **April 15** of each year and contain the minimum requirements as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

The source is in compliance with the required emissions statement submittals.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions from a facility located in Lake County shall not exceed an average of twenty percent (20%) opacity in twenty-four (24) consecutive readings unless otherwise specified in 326 IAC 6-1-10.1.

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to this rule, fugitive particulate matter emissions shall not be visibly crossing the property lines.

No violations of the opacity standards have been observed at this source.

State Rule Applicability - Individual Facilities

326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements)

Pursuant to subsection (d) of this rule, the PM10 emissions from facilities at this source are limited as follows:

Spring Grinder Units 3-0386 & 3-0389	1.083 lbs/ton; 0.045 lbs/hr (combined limit)
Spring Grinder Units 3-0385, 3-0394, & 3-0233	0.019 lbs/ton; 0.05 lbs/hr (each)
Spring Grinder Unit 3-0249	3.792 lbs/ton; 1.82 lbs/hr
Spring Grinder Unit 3-0247	0.09 lbs/ton; 0.03 lbs/hr
Spring Grinder Units 3-0244 & 3-0393	0.021 lbs/ton; 0.040 lbs/hr (combined limit)
Large Line Coil Spring Manufacturing Process	0.700 lbs/ton; 3.50 lbs/hr
Medium Line Coil Spring Manufacturing Process	0.700 lbs/ton; 2.10 lbs/hr
Small Line Coil Spring Manufacturing Process	0.014 lbs/ton; 0.02 lbs/hr
Pangborn Shot Peener (Unit ID 3-1804)	0.011 lbs/ton; 0.06 lbs/hr
Wheelabrator Shot Peener (Unit 3-1811)	0.018 lbs/ton; 0.06 lbs/hr
Wheelabrator Shot Peener (Unit 3-1821)	0.016 lbs/ton; 0.06 lbs/hr
Wheelabrator Shot Peener (Unit 3-1823)	0.016 lbs/ton; 0.06 lbs/hr

In addition, pursuant to subsection (h) of this rule, the following combustion sources shall fire natural gas only and shall be limited to PM10 emissions of 0.003 lbs/MMBtu and 0.16 lbs/hr, each.

50-Ft. Bar Furnace (Unit ID 2-5027)
Medium Screw Furnace (Unit ID 2-5075)
Sellers Boiler (Unit ID 4-5509)
Large Slot Furnace (Unit ID 2-5036)
Small Screw Furnace (Unit ID 2-5085)
Slot Furnaces (Medium Line) (Unit IDs 2-5014 and 2-5015)
Slot Furnace (Small Line) (Unit ID 2-5006)

326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations)

Pursuant to subsection (b) of this rule, the SO2 emissions from the following facilities at this source are limited to 0.3 lbs/MMBtu each. However, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO2 emissions inherent with natural gas combustion is the allowable.

Medium Screw Furnace (Unit ID 2-5075)
Sellers Boiler (Unit ID 4-5509)
Large Slot Furnace (Unit ID 2-5036)
Slot Furnaces (Medium Line) (Unit IDs 2-5014 and 2-5015)
Slot Furnace (Small Line) (Unit ID 2-5006)

326 IAC 8-2-9 (Miscellaneous Metal Coating)

(1) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the following units shall be limited to 3.5 pounds of VOCs per gallon of coating less water.

Spray Painting Operation (Booths 3-2714 and 3-2715)

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the units are in compliance with this requirement.

(2) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the following units shall be limited to 4.3 pounds of VOCs per gallon of coating less water.

Spring Coating Dip Operation

Based on the MSDS submitted by the source and calculations made, the units are in compliance with this requirement.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs, IDEM - OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in permit Section D are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in permit Section D. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(1) Nine (9) Spring Grinders

- (a) Daily visible emissions notations.
- (b) Weekly monitoring of total static pressure drop across the baghouse.
- (c) Broken or failed bag detection response plan.

These monitoring conditions are necessary to ensure compliance with 326 IAC 6-1-10.1 and 326 IAC 2-7 (Part 70).

- (2) Large Line Coil spring Manufacturing Process
 - (a) Daily visible emissions notations.

These monitoring conditions are necessary to ensure compliance with 326 IAC 6-1-10.1 and 326 IAC 2-7 (Part 70).

- (3) Medium Line Coil Spring Manufacturing Process
 - (a) Daily visible emissions notations.

These monitoring conditions are necessary to ensure compliance with 326 IAC 6-1-10.1 and 326 IAC 2-7 (Part 70).

- (4) Small Line Coil Spring Manufacturing Process
 - (a) Daily visible emissions notations.

These monitoring conditions are necessary to ensure compliance with 326 IAC 6-1-10.1 and 326 IAC 2-7 (Part 70).

- (5) Sellers Boiler No. 4-5509
 - (a) Daily inspections of the filters and monthly inspections of the stack shall be performed.
 - (b) VOC usage data shall be kept.

These monitoring conditions are necessary to ensure compliance with 326 IAC 8-2-9 and 326 IAC 2-7 (Part 70).

- (6) Spray Painting Operation (Booths 3-2714 and 3-2715)
 - (a) Daily inspections of the filters and monthly inspections of the stack.
 - (b) Daily visible emissions notations.
 - (c) VOC usage data.

These monitoring conditions are necessary to ensure compliance with 326 IAC 8-2-9 and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

American Steel Foundries – Hammond Plant 4831 Hohman Avenue, Hammond, Indiana 46327 Permit Reviewer: Lito Biscocho, HDEM Page 11 of 11 T089-8273-00204 TSD

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to the Clean Air Act.

Conclusion

The operation of this Steel Spring Coils Manufacturing Plant shall be subject to the conditions of the attached proposed **Part 70 Permit No. T089-8273-00204**.

Plant ID: 00204

Company Name: American Steel Foundries - Hammond Plant Address: 4831 Hohman Avenue, Hammond, Indiana 46327

Calculations By: Lito Biscocho, HDEM

* 1997 Actuals: As per the 1997 Emission Statement

NOTES

EF: EMISSION FACTOR MDR: MAXIMUM DESIGN RATE

MDR: MAXIMUM DESIGN RATE TS: STACK DISCHARGE TEMPERATURE
MDC: MAXIMUM DESIGN CAPACITY UNITS FOR EMISSIONS ARE IN (TPY) EXCEPT WHERE GIVEN

Unit ID: 50-Ft. Bar Furnace (Unit ID 2-5027)

Manufacturer: Holcroft MDC (mmBtu/hr): 20.5 HEAT CONTENT (Btu/cft): 1,050 (Natural Gas Combustion) MDR (mmcft/hr): 0.0195 QTY BURNED (mmcft/yr): 39.32

CNTRL DEV: None

CE: CONTROL EFFICIENCY

Installed: 1938 PERMITTED OPERATING HRS: 8760 hr/yr

motanoa. 1700	TEMMITTED OF ENVIRONMENT OF THE STATE OF THE												
				POTENTIAL EMISSIONS ALLOWA				BLE	1997	ACTUAL			
S0	CC NO. 1-02-006-0	02	BI	FORE CONTROL	_S		,	AFTER CONTROLS	3			BEFORE	AFTER
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	3	0	0.0586	1.4057	0.2565		0.0586	0.2565	#DIV/O!			0.0590	0.0590
PM10	3	0	0.0586	1.4057	0.2565		0.0586	0.2565	#DIV/O!	0.16	0.70	0.0590	0.0590
SOx	0.6	0	0.0117	0.2811	0.0513		0.0117	0.0513	N/A	0.012	0.051	0.0118	0.0118
NOx	140	0	2.7333	65.6000	11.9720		2.7333	11.9720	N/A			2.7524	2.7524
VOC	2.8	0	0.0547	1.3120	0.2394		0.0547	0.2394	N/A			0.0550	0.0550
CO	35	0	0.6833	16.4000	2.9930		0.6833	2.9930	N/A			0.6881	0.6881
HAPs	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000

Used to heat up whole bars prior to coiling.

PM10: 326 IAC 6-1-10.1(h): 0.003 lbs/MMBtu

SO2 emissions are limited to 0.3 lbs/MMBtu

in accordance with 326 IAC 7-4-1.1(b), however, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO2 emissions inherent with natural gas combustion is the allowable.

Unit ID: Medium Screw Furnace (Unit ID 2-5075)

Manufacturer: Flynn & Dreffin MDC (mmBtu/hr): 13 HEAT CONTENT (Btu/cft): 1,050 (Natural Gas Combustion) MDR (mmcft/hr): 0.0124 QTY BURNED (mmcft/yr):

CNTRL DEV: None (included in Unit 2-5027 throughput)

Installed: 1956 PERMITTED OPERATING HRS: 8760 hr/yr

					POTENTIAL EN	MISSIONS		ALLOWA	BLE	1997	ACTUAL	
SC	CC NO. 1-02-006-0	02	BI	BEFORE CONTROLS			AFTER CONTROLS				BEFORE	AFTER
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	3	0	0.0371	0.8914	0.1627	0.0371	0.1627	#DIV/0!			0.0000	0.0000
PM10	3	0	0.0371	0.8914	0.1627	0.0371	0.1627	#DIV/O!	0.16	0.70	0.0000	0.0000
SOx	0.6	0	0.0074	0.1783	0.0325	0.0074	0.0325	N/A	0.007	0.033	0.0000	0.0000
NOx	140	0	1.7333	41.6000	7.5920	1.7333	7.5920	N/A			0.0000	0.0000
VOC	2.8	0	0.0347	0.8320	0.1518	0.0347	0.1518	N/A			0.0000	0.0000
CO	35	0	0.4333	10.4000	1.8980	0.4333	1.8980	N/A			0.0000	0.0000
HAPs	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000

Used to heat up whole bars prior to coiling.

PM10: 326 IAC 6-1-10.1(h): 0.003 lbs/MMBtu

SO2 emissions are limited to 0.3 lbs/MMBtu

326 IAC 6-1-10.1(d): 0.019 lbs/ton

in accordance with 326 IAC 7-4-1.1(b), however, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO2 emissions inherent with natural gas combustion is the allowable.

Unit ID: Nine (9) Spring Grinders

Coil Spring Grinder (Unit No. 3-0247)

MDR (T/hr): 0.909 YEARLY PROD (T/yr): 7,719

STACK ID (DIAM:HEIGHT): (4: 50)

FLOWRATE (ACFM): 93620

CNTRL DEV: Baghouse (Unit No. 3-3037)

Installation 1961

PERMITTED OPERATING HRS: 8760 hr/yr

Ts(°F): 77 (For all 9 combined)

_P Range: 5 - 6	inches of water				POTENTIAL E	MI	SSIONS			ALLOW	ABLE	1997 F	ACTUAL	
SC	C NO. 3-03-009-	12	BE	FORE CONTROL	.S		,	AFTER CONTROLS				BEFORE	AFTER	ı
POLLUTANT	EF(lbs/Ton)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS	ı
PM	16.25	99.996	14.7713	354.5100	64.6981		0.0006	0.0026	0.0000			62.7169	0.0025	ı
PM10	9.128	99.996	8.2974	199.1364	36.3424		0.0003	0.0015	0.0000	0.03	0.13	35.2295	0.0014	ı
SOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000	ı
NOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000	ı
VOC	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000	ı
CO	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000	ı
HAPs	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000	ı

Manufacturer: Torrington (Model No. None; Serial No. 48640) EF based on Stack Test performed on January 10 & 11, 1996.

All nine grinders are vented through one baghouse.

Baghouse: ETA 2000 Model 1365 Pulse-jet unit with 120 polyester bags for a total filtering area of 8,480 sq. ft.

6/16/94: Rotoclone DC 3-3020 replaced w/ new Baghouse.

Coil Spring Grinder (Unit No. 3-0249) MDR (T/hr): 0.1545

Appendix A: Emissions Calculations
STACK ID (DIAM:HEIGHT): (4: 50)

Manufacturer: Gardner (Model No. 120-A-30; Serial No. 120A131) CNTRL DEV: Baghouse (Unit No. 3-3037)

YEARLY PROD (T/yr): (Covered by above)

FLOWRATE (ACFM): 93620 Ts(°F): 77

Installation 1948

PERMITTED OPERATING HRS: 8760 hr/yr

					POTENTIAL E	MI	ISSIONS		ALLOWA	ABLE	1997	ACTUAL	
SC	C NO. 3-03-009-	12	BE	FORE CONTROL	.S		,	AFTER CONTROLS	3			BEFORE	AFTER
POLLUTANT	EF(lbs/Ton)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	16.25	99.996	2.5106	60.2550	10.9965		0.0001	0.0004	0.0000			#VALUE!	#VALUE!
PM10	9.128	99.996	1.4103	33.8466	6.1770		0.0001	0.0002	0.0000	1.82	7.97	#VALUE!	#VALUE!
SOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!
NOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!
VOC	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!
CO	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!
HAPs	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!

6/16/94: Rotoclone DC 3-0237 replaced w/ new Baghouse.

326 IAC 6-1-10.1(d): 3.792 lbs/ton

Coil Spring Grinder (Unit No. 3-0386) and Tub Grinder (No. 3-0389)

MDR (T/hr): 1.6555 YEARLY PROD (T/yr): (Covered by above) STACK ID (DIAM:HEIGHT): (4: 50) FLOWRATE (ACFM): 93620

CNTRL DEV: Baghouse (Unit No. 3-3037)

Ts(°F): 77

8760 hr/yr

					POTENTIAL E	MI	ISSIONS			ALLOW	ABLE	1997 <i>F</i>	ACTUAL	
SC	C NO. 3-03-009-	12	BE	FORE CONTROL	_S		,	AFTER CONTROLS	3			BEFORE	AFTER	
POLLUTANT	EF(lbs/Ton)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS	
PM	16.25	99.996	26.9019	645.6450	117.8302		0.0011	0.0047	0.0000			#VALUE!	#VALUE!	
PM10	9.128	99.996	15.1114	362.6737	66.1879		0.0006	0.0026	0.0000	0.045	0.20	#VALUE!	#VALUE!	
SOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!	
NOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!	
VOC	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!	
CO	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!	
HAPs	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!	

6/16/94: Rotoclone DC 3-3031 replaced w/ new Baghouse.

326 IAC 6-1-10.1(d): 1.083 lbs/ton

Unit 3-0386: Manufacturer: Besly-Wells (Model No. 253; Serial No. 23572030); Installation Date: 1979; MDC = 2222 lbs/hr.

PERMITTED OPERATING HRS:

Unit 3-0389: Manufacturer: Gardner (Model No. 124; Serial No. None); Installation Date: 1980; MDC = 1089 lbs/hr.

0.0000

0.0000

0.0000

Coil Spring Grinders (Units No. 3-0244 and 3-0393)

MDR (T/hr): 4.309

STACK ID (DIAM:HEIGHT): (4: 50) FLOWRATE (ACFM): 93620

CNTRL DEV: Baghouse (Unit No. 3-3037)

POLLUTANT

PM10

SOx

NOx

VOC

CO

HAPs

SCC NO. 3-03-009-12

EF(lbs/Ton)

16.25

9.128

0

0

0

0

0

YEARLY PROD (T/yr): (Covered by above)

Ts(°F): 77

PERMITTED OPERATING HRS:

0.0000

0.0000

0.0000

ט ט	PERATING HRS:	8760	nr/	/yr							
		POTENTIAL E	EMI	SSIONS			ALLOW	/ABLE	1997	ACTUAL	
BE	FORE CONTROL	_S		,	AFTER CONTROLS	S			BEFORE	AFTER	
)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS	
13	1,680.5100	306.6931		0.0028	0.0123	0.0000			#VALUE!	#VALUE!	ļ
26	943.9812	172.2766		0.0016	0.0069	0.0000	0.040	0.175	#VALUE!	#VALUE!	ļ
00	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!	ļ
00	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!	ļ

N/A

N/A

N/A

326 IAC 6-1-10.1(d): 0.021 lbs/ton

#VALUE!

#VALUE!

#VALUE!

#VALUE!

#VALUE!

#VALUE!

Unit 3-0244: Manufacturer: Mattison (Model No. 900-SS; Serial No. 900-SS-102); Installation Date: 1960; MDR = 4,309 lbs/hr.

Unit 3-0393: Manufacturer: Mattison (Model No. 900; Serial No. 900-47); Installation Date: 1991; MDC = 4,309 lbs/hr.

(lbs/hr)

70.0213

39.3326

0.0000

0.0000

0.0000

0.0000

0.0000

4/5/91: Besly Grinder (3-0262) replaced with Mattison Grinder (3-0393).

CE (%)

99.996

99.996

0

0

0

0

6/16/94: Rotoclone DC 3-3033 replaced w/ new Baghouse.

Coil Spring Grinders (Units No. 3-0385,

3-0394, and 3-0233)

CNTRL DEV: Baghouse (Unit No. 3-3037)

MDR (T/hr): 2.2035

0.0000

0.0000

0.0000

YEARLY PROD (T/yr): (Covered by above)

STACK ID (DIAM:HEIGHT): (4: 50)

FLOWRATE (ACFM): 93620 Ts(°F): 77

PERMITTED OPERATING HRS: 8760 hr/vr

							,							
					POTENTIAL E	MI	SSIONS			ALLOWA	ABLE	L	1997 <i>F</i>	ACTUAL
SC	CC NO. 3-03-009-	12	BE	FORE CONTROL	.S		,	AFTER CONTROLS	3				BEFORE	AFTER
POLLUTANT	EF(lbs/Ton)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	L	CONTROLS	CONTROLS
PM	16.25	99.996	35.8069	859.3650	156.8341		0.0014	0.0063	0.0000				#VALUE!	#VALUE!
PM10	9.128	99.996	20.1135	482.7252	88.0973		0.0008	0.0035	0.0000	0.15	0.66		#VALUE!	#VALUE!
SOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A				#VALUE!	#VALUE!
NOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A				#VALUE!	#VALUE!
VOC	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A				#VALUE!	#VALUE!
CO	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A				#VALUE!	#VALUE!
HAPs	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A				#VALUE!	#VALUE!

0.0000

0.0000

0.0000

326 IAC 6-1-10.1(d): 0.019 lbs/ton (each)

Unit 3-0385: Manufacturer: Besly-Wells (Model No. 55-25-05; Serial No. 253-72-028); Installation Date: 1976; MDR = 3098 lbs/hr.

Unit 3-0394: Manufacturer: Besly MDC = 703 lbs/hr.

Unit 3-0233: Manufacturer: Gardner (Model No. Single End; Serial No. 9618); Installation Date: 1939; MDC = 606 lbs/hr.

6/16/94: Rotoclone DC replaced w/ new Baghouse.

1/27/95: Tub Grinder (No. 3-0388) not tied to this dust collector. Moved to another plant.

Stack Test: 2/16/90: Unit 3-0385. #516391 springs at 60 pieces per hour. PM (avg) = 7.802 lbs/hr; PM10 (avg) = 4.487 lbs/hr.

MDR (for all grinder combined) =

9.2315 T/hr

Stack Test: Coil Spring Grinders Dust Collector (3-3037): 1/10 & 11/96: PM10 (avg) = 0.1688 lbs/hr. RM 201A.

Totals: Nine (9) Spring Grinders

			POTENTIAL E	MISS	SIONS			ALLOWA	BLE	1997	7 ACTUAL	
	BE	FORE CONTROL	.S		,	AFTER CONTROLS			BEFORE	AFTER		
POLLUTANT	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS	
PM	150.0119	3,600.2850	657.0520		0.0060	0.0263	0.0000			62.7169	0.0025	
PM10	84.2651	2,022.3632	369.0813		0.0034	0.0148	0.0000	2.0850	9.1323	35.2295	0.0014	
SOx	0.0000	0.0000	0.0000		0.0000	0.0000	#VALUE!			0.0000	0.0000	
NOx	0.0000	0.0000	0.0000		0.0000	0.0000	#VALUE!			0.0000	0.0000	
VOC	0.0000	0.0000	0.0000		0.0000	0.0000	#VALUE!			0.0000	0.0000	
CO	0.0000	0.0000	0.0000		0.0000	0.0000	#VALUE!			0.0000	0.0000	
HAPs	0.0000	0.0000	0.0000		0.0000	0.0000	#VALUE!			0.0000	0.0000	

Unit ID: Large Line Coil Spring Manufacturing Process

Quench Tank 3-2845 MDR (T/hr): 5 STACK ID (DIAM:HEIGHT): (3: 35) FLOWRATE (ACFM): 12000 Manufacturer: Industrial Combustion YEARLY PROD (T/yr): 3,693

CNTRL DEV: Electrostatic Precipitator (No. 3-3028)

Installation 1959 PERMITTED OPERATING HRS: 8760 hr/vr

	• •		TERMINITES OF ERRORMON OF CO. THE STATE OF CO.												
			POTENTIAL EMISSIONS												
S	CC NO. 3-04-022-	10	BE	FORE CONTROL	_S		P	AFTER CONTROLS							
TV	EF(lbs/Ton)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)						
	7	98	35.0000	840.0000	153.3000		0.7000	3.0660	0.0072						
	7	98	35.0000	840.0000	153.3000		0.7000	3.0660	0.0072						
	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A						
	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A						
	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A						
	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A						
	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A						

Based on mass balance by source using quench oil consumed and tonnage throughput, 7 lbs/ton of spring was determined.

In-process Fuel Usage, Draw Furnace 2-5164 MDC (mmBtu/hr): 9.8 HEAT CONTENT (Btu/cft): 1,050 STACK ID (DIAM:HEIGHT): (3: 35) QTY BURNED (mmcft/yr): 7.84 (Natural Gas Combustion) MDR (mmcft/hr): 0.0093 FLOWRATE (ACFM): 12000 Stress relieve newly coiled springs Ts(°F): 100

POLLUTANT

PM PM10

> SOx NOx

> VOC

CO HAPs

CNTRL DEV: None PERMITTED OPERATING HRS: 8760 hr/yr

			POTENTIAL EMISSIONS							
S0	CC NO. 3-04-900-	03	BE	FORE CONTROL	.S	,	AFTER CONTROLS	;		
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)		
PM	3	0	0.0280	0.6720	0.1226	0.0280	0.1226	0.0003		
PM10	3	0	0.0280	0.6720	0.1226	0.0280	0.1226	0.0003		
SOx	0.6	0	0.0056	0.1344	0.0245	0.0056	0.0245	N/A		
NOx	140	0	1.3067	31.3600	5.7232	1.3067	5.7232	N/A		
VOC	2.8	0	0.0261	0.6272	0.1145	0.0261	0.1145	N/A		
CO	35	0	0.3267	7.8400	1.4308	0.3267	1.4308	N/A		
HAPs	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A		

1997	ACTUAL
BEFORE	AFTER
CONTROLS	CONTROLS
12.9255	0.2585
12.9255	0.2585
0.0000	0.0000
0.0000	0.0000
0.0000	0.0000
0.0000	0.0000
0.0000	0.0000

Ts(°F): 100

	1997	ACTUAL
	BEFORE	AFTER
	CONTROLS	CONTROLS
	0.0118	0.0118
	0.0118	0.0118
	0.0024	0.0024
	0.5488	0.5488
	0.0110	0.0110
	0.1372	0.1372
	0.0000	0.0000

Totals: Large Line Coil Spring Manufacturing Process

			POTENTIAL E	MIS	SSIONS			ALLOWABLE			1997	ACTUAL	
	BE	FORE CONTROL	.S	AFTER CONTROLS						BEFORE	AFTER		
POLLUTANT	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)		(lbs/hr)	(TPY)		CONTROLS	CONTROLS
PM	35.0280	840.6720	153.4226	0.7280 3.1886 0.0075					12.9373	0.2703			
PM10	35.0280	840.6720	153.4226		0.7280	3.1886	0.0075		3.50	3.50 15.33		12.9373	0.2703
SOx	0.0056	0.1344	0.0245		0.0056	0.0245	#VALUE!					0.0024	0.0024
NOx	1.3067	31.3600	5.7232		1.3067	5.7232	#VALUE!					0.5488	0.5488
VOC	0.0261	0.6272	0.1145		0.0261	0.1145	#VALUE!					0.0110	0.0110
CO	0.3267	7.8400	1.4308	0.3267 1.4308 #VALUE!					0.1372	0.1372			
HAPs	0.0000	0.0000	0.0000	0.0000 0.0000 #VALUE!					0.0000	0.0000			

PM10: 326 IAC 6-1-10.1(d): 0.700 lbs/ton

Unit ID: Medium Line Coil Spring Manufacturing Process

Quench Tank 3-2838MDR (T/hr): 3STACK ID (DIAM:HEIGHT): (3: 35)Manufacturer: Holcroft; Model No. C-188; Serial No. NoneYEARLY PROD (T/yr): 2,379FLOWRATE (ACFM): 12000

CNTRL DEV: Electrostatic Precipitator (No. 3-3027)

Installation 1956 PERMITTED OPERATING HRS: 8760 hr/yr

			POTENTIAL EMISSIONS									
	SCC NO. 3-04-022-	10	BE	FORE CONTROL	.S	A	AFTER CONTROLS					
POLLUTANT	EF(lbs/Ton)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)				
PM	7	98	21.0000	504.0000	91.9800	0.4200	1.8396	0.0043				
PM10	7	98	21.0000	504.0000	91.9800	0.4200	1.8396	0.0043				
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A				
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A				
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A				
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A				
HAPs	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A				

1997	ACTUAL
BEFORE	AFTER
CONTROLS	CONTROLS
8.3265	0.1665
8.3265	0.1665
0.0000	0.0000
0.0000	0.0000
0.0000	0.0000
0.0000	0.0000
0.0000	0.0000

Ts(°F): 100

Based on mass balance by source using quench oil consumed and tonnage throughput, 7 lbs/ton of spring was determined.

In-process Fuel Usage, Draw Furnace 2-5097 MDC (mmBtu/hr): 5.1 HEAT CONTENT (Btu/cft): 1,050 STACK ID (DIAM:HEIGHT): (3: 35) (Natural Gas Combustion) MDR (mmcft/hr): 0.0049 QTY BURNED (mmcft/yr): 15.94 FLOWRATE (ACFM): 12000

Stress relieve newly coiled springs

CNTRL DEV: None PERMITTED OPERATING HRS: 8760 hr/yr

				POTENTIAL EMISSIONS										
SC	CC NO. 3-04-900-0	03	BEFORE CONTROLS				AFTER CONTROLS							
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr) (lbs/day) (TPY)			(lbs/hr)	(TPY)	(gr/dscf)						
PM	3	0	0.0146	0.3497	0.0638		0.0146	0.0638	0.0001					
PM10	3	0	0.0146	0.3497	0.0638		0.0146	0.0638	0.0001					
SOx	0.6	0	0.0029	0.0699	0.0128		0.0029	0.0128	N/A					
NOx	140	0	0.6800	16.3200	2.9784		0.6800	2.9784	N/A					
VOC	2.8	0	0.0136	0.3264	0.0596		0.0136	0.0596	N/A					
CO	35	0	0.1700	4.0800	0.7446		0.1700	0.7446	N/A					
HAPs	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A					

1997 ACTUAL										
BEFORE	AFTER									
CONTROLS	CONTROLS									
0.0239	0.0239									
0.0239	0.0239									
0.0048	0.0048									
1.1158	1.1158									
0.0223	0.0223									
0.2790	0.2790									
0.0000	0.0000									

Ts(°F): 100

Totals: Medium Line Coil Spring Manufacturing Process

_	Totals. Mean	um Eme con Sp										
		I	POTENTIAL E	MISSIONS		ALLOWABLE				1997	ACTUAL	
	BEFORE CONTROLS AFTER CONTROLS										BEFORE	AFTER
POLLUTANT	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)		(lbs/hr) (TPY)			CONTROLS	CONTROLS
PM	21.0146	504.3497	92.0438	0.4346	1.9034	0.0045					8.3504	0.1904
PM10	21.0146	504.3497	92.0438	0.4346 1.9034		0.0045		2.10	9.20		8.3504	0.1904
SOx	0.0029	0.0699	0.0128	0.0029	0.0128	#VALUE!					0.0048	0.0048
NOx	0.6800	16.3200	2.9784	0.6800	2.9784	#VALUE!					1.1158	1.1158
VOC	0.0136	0.3264	0.0596	0.0136	0.0596	#VALUE!					0.0223	0.0223
CO	0.1700	4.0800	0.7446	0.1700	0.7446	#VALUE!					0.2790	0.2790
HAPs	0.0000	0.0000	0.0000	0.0000 0.0000		#VALUE!					0.0000	0.0000

PM10: 326 IAC 6-1-10.1(d): 0.700 lbs/ton

0.0000

N/A

Ts(°F): 100

Unit ID: Small Line Coil Spring Manufacturing Process

HAPs

Quench Tank 3-2821MDR (T/hr): 1.5STACK ID (DIAM:HEIGHT): (3: 35)Manufacturer: Industrial CombustionYEARLY PROD (T/yr): 1,647FLOWRATE (ACFM): 12000

0.0000

CNTRL DEV: Electrostatic Precipitator (No. 3-3024)
Installation 1973 PERMITTED OPERATING HRS: 8760 hr/vr

 istaliation 177	5		TERMITTED	LICATINO TIKS.	0700	1111/	y yı					
			POTENTIAL EMISSIONS									
SC	CC NO. 3-04-022-	10	BEFORE CONTROLS				AFTER CONTROLS					
POLLUTANT	EF(lbs/Ton)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)			
PM	7	98	10.5000	252.0000	45.9900		0.2100	0.9198	0.0022			
PM10	7	98	10.5000	252.0000	45.9900		0.2100	0.9198	0.0022			
SOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			
NOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			
VOC	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			
CO	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			

0.0000

Based on mass balance by source using quench oil consumed and tonnage throughput, 7 lbs/ton of spring was determined.

0.0000

In-process Fuel Usage, Draw Furnace 2-5163 MDC (mmBtu/hr): 5.1 HEAT CONTENT (Btu/cft): 1,050 STACK ID (DIAM:HEIGHT): (3: 35) (Natural Gas Combustion) MDR (mmcft/hr): 0.0049 QTY BURNED (mmcft/yr): 14.51 FLOWRATE (ACFM): 12000 CNTRL DEV: None

0.0000

Installed: (See Below)

PERMITTED OPERATING HRS: 8760 hr/yr

POTENTIAL EMISSIONS

			POTENTIAL EMISSIONS									
S0	CC NO. 3-04-900-0	03	BE	FORE CONTROL	S	AFTER CONTROLS						
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr) (lbs/day) (TPY)			(lbs/hr)	(TPY)	(gr/dscf)				
PM	3	0	0.0146	0.3497	0.0638	0.0146	0.0638	0.0001				
PM10	3	0	0.0146	0.3497	0.0638	0.0146	0.0638	0.0001				
SOx	0.6	0	0.0029	0.0699	0.0128	0.0029	0.0128	N/A				
NOx	140	0	0.6800	16.3200	2.9784	0.6800	2.9784	N/A				
VOC	2.8	0	0.0136	0.3264	0.0596	0.0136	0.0596	N/A				
CO	35	0	0.1700	4.0800	0.7446	0.1700	0.7446	N/A				
HAPs	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A				

	IS(T):	100										
ı	1997 ACTUAL											
	BEFORE	AFTER										
	CONTROLS	CONTROLS										
	0.0218	0.0218										
	0.0218	0.0218										
	0.0044	0.0044										
	1.0157	1.0157										
	0.0203	0.0203										
	0.2539	0.2539										
	0.0000	0.0000										

1997 ACTUAL

AFTER

CONTROLS

0.1153

0.1153 0.0000

0.0000

0.0000

0.0000

0.0000

BEFORE

CONTROLS

5.7645

5.7645

0.0000

0.0000

0.0000

0.0000

Totals: Small Line Coil Spring Manufacturing Process

	Totals of all all of the opting managed my recess													
			POTENTIAL E	MISSIONS					ALLOWA	ABLE		1997	ACTUAL	
	BE	FORE CONTROL	.S	AFTER CONTROLS							BEFORE	AFTER		
POLLUTANT	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)		(TPY)	(gr/dscf)		(lbs/hr)	(TPY)		CONTROLS	CONTROLS	
PM	10.5146	252.3497	46.0538	0.2	246	0.9836	0.0023					5.7863	0.1371	
PM10	10.5146	252.3497	46.0538	0.2	246	0.9836	0.0023		0.02	0.09		5.7863	0.1371	
SOx	0.0029	0.0699	0.0128	0.0)29	0.0128	#VALUE!					0.0044	0.0044	
NOx	0.6800	16.3200	2.9784	0.6	300	2.9784	#VALUE!					1.0157	1.0157	
VOC	0.0136	0.3264	0.0596	0.0	136	0.0596	#VALUE!					0.0203	0.0203	
CO	0.1700	4.0800	0.7446	0.1	0.1700 0.74		#VALUE!					0.2539	0.2539	
HAPs	0.0000	0.0000	0.0000	0.0	0.0000 0.0000 #\		#VALUE!					0.0000	0.0000	

PM10: 326 IAC 6-1-10.1(d): 0.014 lbs/ton

Unit ID: Sellers Boiler No. 4-5509

(Model No. None; Serial No. S092562) MDC (mmBtu/hr): 10.5 HEAT CONTENT (Btu/cft): 1,050

MDR (mmcft/hr): 0.0100

CNTRL DEV: None Installed: 1978

(Natural Gas Combustion)

QTY BURNED (mmcft/yr): 11.55

STACK ID (DIAM:HEIGHT): (2: 40) FLOWRATE (ACFM): 2958

Ts(°F): 350

PERMITTED OPERATING HRS: 8760 hr/yr

					POTENTIAL EI	MISSIONS		ALLOWA	BLE	1997	ACTUAL	
SCC NO. 1-02-006-02			BE	FORE CONTROL	S		AFTER CONTROLS	5			BEFORE	AFTER
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	3	0	0.0300	0.7200	0.1314	0.0300	0.1314	0.0018			0.0173	0.0173
PM10	3	0	0.0300	0.7200	0.1314	0.0300	0.1314	0.0018	0.030	0.131	0.0173	0.0173
SOx	0.6	0	0.0060	0.1440	0.0263	0.0060	0.0263	N/A	0.006	0.026	0.0035	0.0035
NOx	140	0	1.4000	33.6000	6.1320	1.4000	6.1320	N/A			0.8085	0.8085
VOC	2.8	0	0.0280	0.6720	0.1226	0.0280	0.1226	N/A			0.0162	0.0162
CO	35	0	0.3500	8.4000	1.5330	0.3500	1.5330	N/A			0.2021	0.2021
HAPs	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000

PM10: 326 IAC 6-1-10.1(h): 0.003 lbs/MMBtu

SO2 emissions are limited to 0.3 lbs/MMBtu

in accordance with 326 IAC 7-4-1.1(b), however, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO2 emissions inherent with natural gas combustion is the allowable.

Unit ID: Spray Painting Operation

Booths 3-2714 and 3-2715 (High Pressure Air-Assisted Airless) MDR (gal/hr): 4.1 (Calculations based on worst-case coating) YEARLY PROD (gal/yr): 664

MDR based on the combined usage rates.

(Combined for Units 3-2714 & 2715)

STACK ID (DIAM:HEIGHT): (2: 30) FLOWRATE (ACFM): 5200

and NPR solvents.

Ts(°F): 70

AFTER

CONTROLS

CNTRL DEV: Dry Filters Installation: 1989

POLLUTANT

PERMITTED OPERATING HRS: 8760

hr/yr

: 19	89				POTENTIAL EN	MISSIONS			ALLOWABLE			1997	ACTUAL
SCC NO. 4-02-002-01			В	EFORE CONTROL	_S		AFTER CONTROLS	S				BEFORE	AFT
NT	EF(lbs/gal)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		CONTROLS	CONTR
	0.4275	98	1.7528	42.0660	7.6770	0.0351	0.1535	#DIV/O!				0.1418	(
	0.21375	98	0.8764	21.0330	3.8385	0.0175	0.0768	#DIV/O!				0.0709	(
	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A				0.0000	(

PM	0.4275	98	1.7528	42.0660	7.6770	0.0351	0.1535	#DIV/0!			0.1418	0.0028
PM10	0.21375	98	0.8764	21.0330	3.8385	0.0175	0.0768	#DIV/O!			0.0709	0.0014
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
VOC	3.5	0	14.3500	344.4000	62.8530	14.3500	62.8530	N/A	14.4	62.9	1.1611	1.1611
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
HAPs	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
Overspray: 5%	PM; 2.5% PM10								VOC: 326 IA	C 8-2-9(d)(2)	: 3.5 lbs/gal less H	20

Units Painted: Unit 3-2715 (Slider Assemblies), Unit 3-2714 (Coil Springs)

Coating Used: Booth 3-2714: John Deere Greene (density = 8.55 lbs/gal; 2.82 lbs VOC/gal less water). Max coating Usage = 0.10 gal/hr.

Tan (density = 9.29 lbs/gal; 2.63 lbs VOC/gal less water). Max coating Usage = 0.10 gal/hr.

Booth 3-2715: Gloss Black Enamel (density = 8.44 lbs/gal; 3.31 lbs VOC/gal less water). Max Coating Usage = 4.00 gal/hr.

7/3/89: NSR

American Steel Foundries - Hammond Plant Page 12 of 21 T089-8273-00204

Unit ID: Spring Coating Dip Tanks

Nin (9) Dip Tanks

MDR (gal/hr): 11.94

MDR based on the combined usage rates.

YEARLY PROD (gal/yr): 9,913

(Total consumption for 1997 was 25 Tons)

Tectyl 300G Thinned w/ 50% Glycol Ether and 50% water at ratio of 1:7 (solvent/paint). (density = 8.29 lbs/gal; 3.63 lbs VOC/gal).

CNTRL DEV: None

(Tank ID)

3-2813

3-2869

3-2868

PERMITTED OPERATING HRS: 8760 hr/yr

	POTENTIAL EMISSIONS									ALLOWA	ABLE	1997	ACTUAL
S0	SCC NO. 4-02-002-01 BEFORE CONTROLS AFTER CONTROLS											BEFORE	AFTER
POLLUTANT	EF(lbs/gal)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	#DIV/0!			0.0000	0.0000
PM10	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	#DIV/0!			0.0000	0.0000
SOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000
VOC	4.3	0	51.3420	1,232.2080	224.8780		51.3420	224.8780	N/A	51.3	224.9	21.3120	21.3120
CO	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000
HAPs 3.63 0 43.3422 1,040.2128 189.8388 43.3422 189.8388 N/A												17.9913	17.9913
1) Calculations	1) Calculations based on worst-case coatings which contain 4.3 lbs/gal. VOC: 326 IAC 8-2-											: 4.3 lbs/gal less l	120

¹⁾ Calculations based on worst-case coatings which contain 4.3 lbs/gal.

(Final Inspection Area)

(Tank Location) (Coating Used) and NPR solvents.

> Max Coating Usage = 1.87 gal/hr. 15.5023

3-2865 (Final Inspection Area) Tectyl 300G Thinned w/ 50% Glycol Ether and 50% water at ratio of 1:7 (solvent/paint). (density = 8.29 lbs/gal; 3.63 lbs VOC/gal).

> Max Coating Usage = 1.87 gal/hr. 15.5023

3-2865A y Medium Spring Line) Tectyl 300G Thinned w/ 50% Glycol Ether and 50% water at ratio of 1:7 (solvent/paint). (density = 8.29 lbs/gal; 3.63 lbs VOC/gal).

> Max Coating Usage = 2.15 gal/hr. 17.8235

3-2867 (By Torrington Grinder; Tectyl 300G Thinned w/ 50% Glycol Ether and 50% water at ratio of 1:7 (solvent/paint). (density = 8.29 lbs/gal; 3.63 lbs VOC/gal).

Max Coating Usage = 1.74 gal/hr. 200 gal) 14.4246

(By Torrington Grinder; NOX RUST X-110 thinned w/ Kwik-Dry 66 at ratio of 1:1. (density = 6.86 lbs/gal; 4.3 lbs VOC/gal).

100 gal) Max Coating Usage = 0.84 gal/hr. 5.7624 lbs/hr.

3-2870 (NE Corner of Plant; Tectyl 300G Thinned w/ 50% Glycol Ether and 50% water at ratio of 1:7 (solvent/paint). (density = 8.29 lbs/gal; 3.63 lbs VOC/gal).

Max Coating Usage = 1.70 gal/hr. 14.093 lbs/hr. 165 gal)

3-2871 (NE Corner of Plant; NOX RUST X-110 thinned w/ Kwik-Dry 66 at ratio of 1:1. (density = 6.86 lbs/gal; 4.3 lbs VOC/gal).

> 170 gal) Max Coating Usage = 1.77 gal/hr. 12.1422 lbs/hr.

(By Torrington Grinder; Quench Oil. (density = 7.26 lbs/gal). (No VOC)

Max Coating Usage = 2.50 gal/hr. 120 gal)

3-2872 (NE Corner of Plant; Quench Oil. (density = 7.26 lbs/gal). (No VOC)

> 170 gal) Max Coating Usage = 2.50 gal/hr.

Total Consumption 1997: Solvent-Based = 9 Tons; Water-based = 25 Tons.

Glycol Ether used to thin Tectyl 300G is 100% VOC and a HAP. Thus, the HAPs EF = (3.63 lbs VOC/gal) x (1 lb Glycol Ether/8 lbs coating) / (8.29 lbs coating/gal) *2000

109.469 lbs/ton

²⁾ MDR based on usage of all Coatings containing VOC/HAP.

** SOURCE TOTALS w/o Insignificant Act: American Steel Foundries - Hammond Plant **

-	JOURGE	TOTALS W/O III	significant Ac	, t. A	menean steel	illiona i lant						
			POTENTIAL E	MISSI	ONS			ALLOWABLE			1997 ACTUAL	
	BI	EFORE CONTROL	_S		,	AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		CONTROLS	CONTROLS
PM	218.4475	5,242.7396	956.8000		1.5539	6.8061	#DIV/O!	0.0000	0.0000		90.0089	0.6794
PM10	151.8244	3,643.7847	664.9907		1.5338	6.7178	#DIV/O!	8.0560	35.2853		62.4507	0.6769
SOx	0.0366	0.8777	0.1602		0.0366	0.1602	#VALUE!	0.0251	0.1101		0.0267	0.0267
NOx	8.5333	204.8000	37.3760		8.5333	37.3760	#VALUE!	0.0000	0.0000		6.2412	6.2412
VOC	65.8627	1,580.7040	288.4785		65.8627	288.4785	#VALUE!	65.6920	287.7310		22.5979	22.5979
CO	2.1333	51.2000	9.3440		2.1333	9.3440	#VALUE!	0.0000	0.0000		1.5603	1.5603
HAPs	43.3422	1,040.2128	189.8388		43.3422	189.8388	#VALUE!	0.0000	0.0000		17.9913	17.9913

SO2 emissions are limited to 0.3 lbs/MMBtu

in accordance with 326 IAC 7-4-1.1(b), however, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO2 emissions inherent with natural gas combustion is the allowable.

** Deleted by ASF in correspondence dated 3/20/96**

Miscellaneous Line Coil Spring Manufacturing Process: Draw Furnace No. 2-5131, oil quench tank No. 3-2818, and ESP No. 3-3026 rated at 98% CE. Walking Beam Furnace No. 2-5181: 7.5 MMBtu/hr heat input; NG only.

** Insignificant Activities**

- Space Heaters, process heaters, or boilers using the following fuels.
 A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
- 2) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- 3) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brasing equipment, cutting torches, soldering equipment, welding equipment.
- 4) Quenching operations used with heat treating processes.
- 5) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.
- 6) Paved and unpaved roads and parking lots with public access.

Unit ID: Large Slot Furnace (Unit ID 2-5036)

MDC (mmBtu/hr): 2.5 HEAT CONTENT (Btu/cft): 1,050

(Natural Gas Combustion) MDR (mmcft/hr): 0.0024 QTY BURNED (mmcft/yr): (included in Unit 2-5027 throughput)

CNTRL DEV: None

PERMITTED OPERATING HRS: 8760 hr/yr

					POTENTIAL E	MISSIONS	;			ALLOWA	ABLE	1997 ACTUAL	
SCC NO. 1-02-006-03 BEFORE CONTROLS								AFTER CONTROLS	;			BEFORE	AFTER
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lb	s/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	12	0	0.0286	0.6857	0.1251		0.0286	0.1251	#DIV/O!			#VALUE!	#VALUE!
PM10	12	0	0.0286	0.6857	0.1251		0.0286	0.1251	#DIV/O!	0.16	0.70	#VALUE!	#VALUE!
SOx	0.6	0	0.0014	0.0343	0.0063		0.0014	0.0063	N/A	0.001	0.006	#VALUE!	#VALUE!
NOx	100	0	0.2381	5.7143	1.0429		0.2381	1.0429	N/A			#VALUE!	#VALUE!
VOC	5.3	0	0.0126	0.3029	0.0553		0.0126	0.0553	N/A			#VALUE!	#VALUE!
CO	21	0	0.0500	1.2000	0.2190		0.0500	0.2190	N/A			#VALUE!	#VALUE!
HAPs	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!

PM10: 326 IAC 6-1-10.1(h): 0.003 lbs/MMBtu

SO2 emissions are limited to 0.3 lbs/MMBtu

in accordance with 326 IAC 7-4-1.1(b), however, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO2 emissions inherent with natural gas combustion is the allowable.

.....

Unit ID: Small Slot Furnace (Unit ID 2-5006)

Insignificant: emissions below insignificant levels.

MDC (mmBtu/hr): 1.5 HEAT CONTENT (Btu/cft): 1,050

(Natural Gas Combustion) MDR (mmcft/hr): 0.0014 QTY BURNED (mmcft/yr): (included in Unit 2-5027 throughput)

CNTRL DEV: None

PERMITTED OPERATING HRS: 8760 hr/yr

					POTENTIAL E	MISSIONS			ALLOWA	ABLE	1997 ACTUAL	
SC	CC NO. 1-02-006-0	03	BI	FORE CONTROL	.S		AFTER CONTROL	S			BEFORE	AFTER
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	12	0	0.0171	0.4114	0.0751	0.017	0.0751	#DIV/0!			#VALUE!	#VALUE!
PM10	12	0	0.0171	0.4114	0.0751	0.017	0.0751	#DIV/0!	0.16	0.70	#VALUE!	#VALUE!
SOx	0.6	0	0.0009	0.0206	0.0038	0.000	0.0038	N/A	0.001	0.004	#VALUE!	#VALUE!
NOx	100	0	0.1429	3.4286	0.6257	0.142	0.6257	N/A			#VALUE!	#VALUE!
VOC	5.3	0	0.0076	0.1817	0.0332	0.007	0.0332	N/A			#VALUE!	#VALUE!
CO	21	0	0.0300	0.7200	0.1314	0.030	0.1314	N/A			#VALUE!	#VALUE!
HAPs	0	0	0.0000	0.0000	0.0000	0.000	0.0000	N/A			#VALUE!	#VALUE!

Insignificant: emissions below insignificant levels.

PM10: 326 IAC 6-1-10.1(h): 0.003 lbs/MMBtu

SO2 emissions are limited to 0.3 lbs/MMBtu

in accordance with 326 IAC 7-4-1.1(b), however, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO2 emissions inherent with natural gas combustion is the allowable. Unit ID: Small Screw Furnace (Unit ID 2-5085)

(Natural Gas Combustion)

MDC (mmBtu/hr): 8

HEAT CONTENT (Btu/cft): 1,050

MDR (mmcft/hr): 0.0076

QTY BURNED (mmcft/yr): (included in Unit 2-5027 throughput)

CNTRL DEV: None

PERMITTED OPERATING HRS: 8760 hr/vr

			TERMITTED OF										
					POTENTIAL E	MISSION	S			ALLOWA	BLE	1997 ACTUAL	
S0	CC NO. 1-02-006-0	BI	FORE CONTROL	_S		AFTER CONTROLS					BEFORE	AFTER	
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(1	bs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	12	0	0.0914	2.1943	0.4005		0.0914	0.4005	#DIV/0!			#VALUE!	#VALUE!
PM10	12	0	0.0914	2.1943	0.4005		0.0914	0.4005	#DIV/0!	0.16	0.70	#VALUE!	#VALUE!
SOx	0.6	0	0.0046	0.1097	0.0200		0.0046	0.0200	N/A	0.005	0.020	#VALUE!	#VALUE!
NOx	100	0	0.7619	18.2857	3.3371		0.7619	3.3371	N/A			#VALUE!	#VALUE!
VOC	5.3	0	0.0404	0.9691	0.1769		0.0404	0.1769	N/A			#VALUE!	#VALUE!
CO	21	0	0.1600	3.8400	0.7008		0.1600	0.7008	N/A			#VALUE!	#VALUE!
HAPs	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!

Insignificant: emissions below insignificant levels.

PM10: 326 IAC 6-1-10.1(h): 0.003 lbs/MMBtu

SO2 emissions are limited to 0.3 lbs/MMBtu

in accordance with 326 IAC 7-4-1.1(b), however, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO2 emissions inherent with natural gas combustion is the allowable.

Unit ID: Slot Furnaces (Medium Line) (Unit IDs 2-5014 & 2-5015)

MDC (mmBtu/hr): 5.2

(Natural Gas Combustion) CNTRL DEV: None

MDR (mmcft/hr): 0.0050

HEAT CONTENT (Btu/cft): 1,050

QTY BURNED (mmcft/yr): (included in Unit 2-5027 throughput)

PERMITTED OPERATING HRS:

760	hr/y

					POTENTIAL E	EMISSIONS				ALLOWA	BLE	1997	ACTUAL
S0	CC NO. 1-02-006-0)2	BEFORE CONTROLS				,	AFTER CONTROLS	3			BEFORE	AFTER
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	12	0	0.0594	1.4263	0.2603		0.0594	0.2603	#DIV/O!			#VALUE!	#VALUE!
PM10	12	0	0.0594	1.4263	0.2603		0.0594	0.2603	#DIV/O!	0.16	0.70	#VALUE!	#VALUE!
SOx	0.6	0	0.0030	0.0713	0.0130		0.0030	0.0130	N/A	0.003	0.013	#VALUE!	#VALUE!
NOx	100	0	0.4952	11.8857	2.1691		0.4952	2.1691	N/A			#VALUE!	#VALUE!
VOC	5.3	0	0.0262	0.6299	0.1150		0.0262	0.1150	N/A			#VALUE!	#VALUE!
CO	21	0	0.1040	2.4960	0.4555		0.1040	0.4555	N/A			#VALUE!	#VALUE!
HAPs	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			#VALUE!	#VALUE!

Insignificant: emissions below insignificant levels.

PM10: 326 IAC 6-1-10.1(h): 0.003 lbs/MMBtu

SO2 emissions are limited to 0.3 lbs/MMBtu

in accordance with 326 IAC 7-4-1.1(b), however, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO2 emissions inherent with natural gas combustion is the allowable.

T089-8273-00204

Unit ID: Pangborn Shot Peener (No. 3-1804)

Manufacturer: Pangborn Model No. C20-Type CM; Serial No. None

MDR (T/hr): 0.011 YEARLY PROD (T/yr): 9.5

POTENTIAL EMISSIONS

STACK ID (DIAM:HEIGHT): (1: 30) FLOWRATE (ACFM): 5170

CNTRL DEV: Bag Collector No. 3-3017

Installation 1964

PERMITTED OPERATING HRS: 8760 hr/yr

Ts(°F): 77 ALLOWABLE

ALLOWABLE

_P Range:	1.5 - 2.0 ir	nches of water
	SCC NO.	3-09-002-05

SCC NO. 3-09-002-05			BE	FORE CONTROL	.S	,	AFTER CONTROLS	}			BEFORE	AFTER
POLLUTANT	EF(lbs/Ton)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	8	97.5	0.0880	2.1120	0.3854	0.0022	0.0096	0.0001			0.0380	0.0010
PM10	5.6	97.5	0.0616	1.4784	0.2698	0.0015	0.0067	0.0000	0.06	0.26	0.0266	0.0007
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
HAPs	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000

PM10: 326 IAC 6-1-10.1(d): 0.011 lbs/ton

1997 ACTUAL

1997 ACTUAL

AFTFR

EF obtained from the Air Quality Permits Handbook, Table 3.2. Steel Shots EF = 0.004 lbs PM/lb of Abrasive used. PM10 emissions assumed to be 70% of PM. Insignificant: PM emissions less than 5 lbs/hr and 25 lbs/day.

Unit ID: Wheelabrator Shot Peener (No. 3-1821)

Manufacturer: Wheelabrator MDR (T/hr): 0.008 STACK ID (DIAM:HEIGHT): (3: 35) Model 28CFTurnblast: Serial No. A126609 YEARLY PROD (T/yr): 10.1 FLOWRATE (ACFM): 7143

CNTRL DEV: Bag Collector No. 3-3022

8760 hr/yr

Installation: 1972 PERMITTED OPERATING HRS: POTENTIAL EMISSIONS _P Range: 1.5 - 2.0 inches of water BEFORE CONTROLS SCC NO 3-09-002-05 AFTER CONTROLS

	0 110. 0 07 002	00	D	TORE CONTINUE	.0		TI TER CONTINUES				DEFORE	/ \li L \
POLLUTANT	EF(lbs/Ton)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	8	97.5	0.0640	1.5360	0.2803	0.0016	0.0070	0.0000			0.0404	0.0010
PM10	5.6	97.5	0.0448	1.0752	0.1962	0.0011	0.0049	0.0000	0.06	0.26	0.0283	0.0007
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
HAPs	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000

PM10: 326 IAC 6-1-10.1(d): 0.016 lbs/ton

EF obtained from the Air Quality Permits Handbook, Table 3.2. Steel Shots EF = 0.004 lbs PM/lb of Abrasive used. PM10 emissions assumed to be 70% of PM. Insignificant: PM emissions less than 5 lbs/hr and 25 lbs/day.

Unit ID: Wheelabrator Shot Peener (No. 3-1811)

Manufacturer: Wheelabrator MDR (T/hr): 0.008 STACK ID (DIAM:HEIGHT): (1: 20)
Model 112; Serial No. A85613 YEARLY PROD (T/yr): 14.7 FLOWRATE (ACFM): 3000
CNTRL DEV: Bag Collector No. 3-1811

Installation 1951 PERMITTED OPERATING HRS: 8760 hr/yr

P. Pange: 1.5 - 2.0 inches of water POTENTIAL EMISSIONS

_P Range: 1.5	- 2.0 inches of war	ter			POTENTIAL EN	MISSIONS	ALLOWA	BLE	1997	ACTUAL		
SCC NO. 3-09-002-05			BEFORE CONTROLS				AFTER CONTROLS	3			BEFORE	AFTER
POLLUTANT	EF(lbs/Ton)	CE (%)	(lbs/hr) (lbs/day) (TPY)		(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS	
PM	8	97.5	0.0640	1.5360	0.2803	0.0016	0.0070	0.0001			0.0588	0.0015
PM10	5.6	97.5	0.0448	1.0752	0.1962	0.0011	0.0049	0.0000	0.06	0.26	0.0412	0.0010
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000
HAPs	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A			0.0000	0.0000

PM10: 326 IAC 6-1-10.1(d): 0.018 lbs/ton

EF obtained from the Air Quality Permits Handbook, Table 3.2. Steel Shots EF = 0.004 lbs PM/lb of Abrasive used. PM10 emissions assumed to be 70% of PM.

Unit ID: Wheelabrator Shot Peener (No. 3-1823)

Manufacturer: Wheelabrator MDR (T/hr): 0.008 STACK ID (DIAM:HEIGHT): (1: 30)
Model 28CFTurnblast; Serial No. A133341 YEARLY PROD (T/yr): 16.7 FLOWRATE (ACFM): 4000
CNTRL DEV: Bag Collector No. 3-1823 Ts(*F): 77

PERMITTED OPERATING HRS: 8760 hr/yr

					POTENTIAL E	MI	SSIONS	ALLOWA	BLE	1997	ACTUAL		
SCC NO. 3-09-002-05			BEFORE CONTROLS				Į.	AFTER CONTROLS				BEFORE	AFTER
POLLUTANT	EF(lbs/Ton)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	8	97.5	0.0640	1.5360	0.2803		0.0016	0.0070	0.0000			0.0668	0.0017
PM10	5.6	97.5	0.0448	1.0752	0.1962		0.0011	0.0049	0.0000	0.06	0.26	0.0468	0.0012
SOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000
HAPs	0	0	0.0000	0.0000	0.0000		0.0000	0.0000	N/A			0.0000	0.0000

PM10: 326 IAC 6-1-10.1(d): 0.016 lbs/ton

EF obtained from the Air Quality Permits Handbook, Table 3.2. Steel Shots EF = 0.004 lbs PM/lb of Abrasive used. PM10 emissions assumed to be 70% of PM. Insignificant: PM emissions less than 5 lbs/hr and 25 lbs/day.

** TOTALS: Insignificant Activities: American Steel Foundries - Hammond Plant **

_	10171201	morgimiouni 7	000000000000000000000000000000000000000	orroan otoor roun						
		1	POTENTIAL EN	MISSIONS	ALLOWA	BLE	1997 ACTUAL			
	BE	FORE CONTROL	S	,	AFTER CONTROLS	3			BEFORE	AFTER
POLLUTANT	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	0.4766	11.4377	2.0874	0.2036	0.8916	#DIV/O!	0.0000	0.0000	0.2040	0.0051
PM10	0.3926	9.4217	1.7195	0.2015	0.8824	#DIV/O!	0.8800	3.8544	0.1428	0.0036
SOx	0.0098	0.2359	0.0430	0.0098	0.0430	#VALUE!	0.0098	0.0430	0.0000	0.0000
NOx	1.6381	39.3143	7.1749	1.6381	7.1749	#VALUE!	0.0000	0.0000	0.0000	0.0000
VOC	0.0868	2.0837	0.3803	0.0868	0.3803	#VALUE!	0.0000	0.0000	0.0000	0.0000
CO	0.3440	8.2560	1.5067	0.3440	1.5067	#VALUE!	0.0000	0.0000	0.0000	0.0000
HAPs	0.0000	0.0000	0.0000	0.0000	0.0000	#VALUF!	0.0000	0.0000	0.0000	0.0000

Appendix A: Emissions Calculations ** SOURCE TOTALS w/ Insignificant Act: American Steel Foundries - Hammond Plant **

	JOOKOL	TO TALLO WA THIS	igilificant 7tet	,	American Steen								
			POTENTIAL E	MIS	SSIONS		ALLOWABLE			1997	ACTUAL		
	BEFORE CONTROLS				AFTER CONTROLS							BEFORE	AFTER
POLLUTANT	(lbs/hr)	(lbs/day)	(TPY)		(lbs/hr)	(TPY)	(gr/dscf)		(lbs/hr)	(TPY)		CONTROLS	CONTROLS
PM	218.9241	5,254.1773	958.8874		1.7575	7.6978	#DIV/O!		0.0000	0.0000		90.2129	0.6845
PM10	152.2169	3,653.2065	666.7102		1.7352	7.6003	#DIV/O!		8.9360	39.1397		62.5935	0.6805
SOx	0.0464	1.1136	0.2032		0.0464	0.2032	#VALUE!		0.0350	0.1532		0.0267	0.0267
NOx	10.1714	244.1143	44.5509		10.1714	44.5509	#VALUE!		0.0000	0.0000		6.2412	6.2412
VOC	65.9495	1,582.7877	288.8587		65.9495	288.8587	#VALUE!		65.6920	287.7310		22.5979	22.5979
CO	2.4773	59.4560	10.8507		2.4773	10.8507	#VALUE!		0.0000	0.0000		1.5603	1.5603
HAPs	43.3422	1,040.2128	189.8388		43.3422	189.8388	#VALUE!		0.0000	0.0000		17.9913	17.9913

SO2 emissions are limited to 0.3 lbs/MMBtu

in accordance with 326 IAC 7-4-1.1(b), however, 326 IAC 6-1-10.1(h) requires natural gas combustion only. Thus, the more stringent limitation for SO2 emissions inherent with natural gas combustion is the allowable.